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OVERSIGHT ON OSHA REGULATIONS FOR GRAIN HANDLING FACILITIES, 1984

HEARING

BEFORE THE

SUBCOMMITTEE ON LABOR

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

OVERSIGHT ON PROPOSED REGULATIONS WRITTEN BY OSHA FOR GRAIN HANDLING FACILITIES, AND WHAT EFFECT THEY COULD HAVE ON THAT INDUSTRY

JULY 13, 1984
YUKON, OK

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OVERSIGHT ON OSHA REGULATIONS FOR GRAIN HANDLING FACILITIES, 1984

FRIDAY, JULY 13, 1984

U.S. SENATE,
SUBCOMMITTEE ON LABOR,
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Yukon, OK.

The subcommittee met, pursuant to notice, at 9:30 a.m. at Mid-High School, 9th and Oak, Yukon, OK, Senator Don Nickles (chairman of the subcommittee) presiding.

Present: Senator Nickles.

OPENING STATEMENT OF SENATOR NICKLES

Senator NICKLES. Good morning. We will start today's hearing. I appreciate your interest. Hopefully we will have some viable input.

We have several witnesses today, and a few additional people have indicated they want to testify.

We have several experts with us that will greatly contribute to the hearing and give some Oklahoma insight and expertise in an area that probably hasn't received enough, what I would say, commonsense approach.

All of your statements will be entered into the record in full, so you can summarize if you want to. I also have a statement from Senator Boren that I wish to have entered into the record immediately following my statement.

[The prepared statements of Senators Nickles and Boren follow:]

U.S. SENATOR

DON NICKLES

FROM OKLAHOMA

FOR IMMEDIATE RELEASE
July 13, 1984

CONTACT: Paul Lee
202/224-5754

SENATOR NICKLES OPENING STATEMENT ON
OSHA GRAIN HANDLING INDUSTRY REGULATIONS

Good morning. Today's hearing will focus on proposed regulations that have been written by the Occupational Safety and Health Administration for grain handling facilities, and what effect they could have on that industry.

As the Chairman of the Labor Subcommittee, which has direct oversight responsibility for OSHA, I intend to use the findings of this hearing to change the direction OSHA seems to be headed.

There is no question that worker safety must be a top priority in all industries; however, my own initial investigation leads me to believe that OSHA's proposals are based on questionable data, and will yield few benefits for workers. The price that might have to be paid by the grain industry could very well put some operations out of business, and force farmers to pick up another financial load they can ill afford to bear.

In hearings OSHA conducted last month in Washington, testimony revealed that the chairman of a National Academy of Sciences panel was reluctant to support the new OSHA regulations because they would financially crush eight to ten thousand small elevators. OSHA used National Academy of Sciences studies in preparing its regulations.

Furthermore, OSHA did not take recommendations from grain handling industry representatives, or anyone with a basic knowledge of the business, even though it had been advised to do so.

OSHA began considering stricter standards for the industry in 1977 when 65 people were killed in elevator explosions. Since that time, the number of

fatalities has declined substantially. Last year there were no deaths as a result of grain elevator explosions. Yet, the positive safety progress we have witnessed in the last seven years has been given little weight in the OSHA study.

It should be noted that the grain handling industry today is regulated by OSHA under more general industry standards, and the industry has made some important progress. I believe that workable and feasible safety measures developed in conjunction with industry experts would be welcomed by the grain handling industry.

Our farmers should not be forced to bear a financial burden as a result of regulations that will have questionable benefits. I will do everything possible to see that when OSHA issues regulations, they will at least be reasonable and workable, and will also reflect the state of the grain handling industry of 1984, not 1977.

13 July 1984

STATEMENT OF SENATOR BOREN CONCERNING
O.S.H.A. PROPOSAL ON GRAIN HANDLING FACILITIES

MR. CHAIRMAN, I APPRECIATE YOUR CALLING THIS HEARING TO DISCERN THE EFFECTS THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S PROPOSED SAFETY STANDARDS FOR GRAIN HANDLING FACILITIES WOULD HAVE ON OUR SMALLER GRAIN FACILITIES.

BY ALL ESTIMATES I HAVE SEEN, THE SAFETY STANDARD PROPOSED WILL BE VERY COSTLY TO MANY GRAIN AND FEED BUSINESSES AND IN MOST CASES WILL BE COST PROHIBITIVE FOR OUR SMALLER COUNTRY ELEVATORS. FOR EXAMPLE, THE BOISE CITY FARMERS COOPERATIVE ESTIMATES THAT THE INITIAL COSTS OF BRINGING THEIR FACILITIES INTO COMPLIANCE WITH THE PROPOSED RULES WOULD AMOUNT TO OVER $70,000.00. FOR THE SAME COOPERATIVE, THE RULES WOULD REUSLT IN AN INCREASED ANNUAL OPERATING COST OF $8,593.00. THE APACHE FARMERS COOPERATIVE ESTIMATES THAT THE INITIAL COSTS OF BRINGING THEIR FACILITIES INTO COMPLIANCE WOULD BE OVER $26,000, WITH AN INCREASED ANNUAL OPERATING COST OF $1,125.

IT IS ALSO THOUGHT BY MANY IN THE GRAIN HANDLING BUSINESS THAT THESE PROPOSED RULES WILL NOT ENHANCE THE SAFETY OF THE WORKERS. THE GRAIN INDUSTRY HAS ALREADY SPENT MILLIONS OF DOLLARS ON GRAIN AND DUST ELEVATOR EXPLOSION RESEARCH. THIS RESEARCH RESULTED IN THE FACT THAT IN 1983 THERE WERE NO DEATHS FROM EXPLOSIONS.

CERTAINLY, EVERYONE IS CONCERNED ABOUT THE SAFETY OF THE GRAIN ELEVATOR WORKER. YET, ANY SAFETY STANDARD PROPOSED MUST BE FEASIBLE, COST-EFFECTIVE, AND CAPABLE OF PRODUCING THE OUTCOME

FOR WHICH IT WAS INTENDED -- ENHANCED SAFETY. IN THIS CASE, THE PROPOSED RULES ARE NOT COST-EFFECTIVE, PARTICULARLY FOR OUR SMALLER FACILITIES, AND IT IS HIGHLY QUESTIONABLE WHETHER OR NOT THE RULES WILL ACTUALLY ENHANCE THE WORKERS' SAFETY.

AT A TIME WHEN THE AMERICAN FARMER IS RECEIVING LESS THAN 50 PERCENT OF PARITY, THE LAST THING WE NEED TO DO IS IMPLEMENT RULES WHICH WOULD SIMPLY DECREASE THE PRICE THE FARMER RECEIVES NOW. ANOTHER DECREASE IN THE PRICE THE FARMER RECEIVES COULD BE DEVASTATING, NOT ONLY TO THE ECONOMY OF OUR STATE, BUT TO THE ECONOMY OF THE NATION AS A WHOLE. EARLIER THIS YEAR, I WROTE A LETTER TO O.S.H.A. URGING THAT THEY NOT IMPLEMENT REGULATIONS WHICH WOULD PROVE TO BE COST PROHIBITIVE AND POSSIBLY IMPRACTICAL FOR SMALLER GRAIN HANDLING FACILITIES. IT IS MY HOPE THAT O.S.H.A. WILL WORK WITH THESE FACILITIES AND DEVELOP A NEW PROPOSAL WHICH WILL NOT BE COST-PROHIBITIVE AND WILL AT THE SAME TIME BE PRACTICAL AND INCREASE WORKER SAFETY.

MR. CHAIRMAN, I APPRECIATE YOUR CALLING THIS HEARING.

Senator NICKLES. Our first panelist is Joe Hampton. He is the executive vice president of the Oklahoma Grain & Feed Association from Enid, OK. Joe, please proceed.

STATEMENT OF JOE HAMPTON, EXECUTIVE VICE PRESIDENT, OKLAHOMA GRAIN & FEED ASSOCIATION, ENID, OK

Mr. HAMPTON. My name is Joe Hampton. I am the general manager of the Enid Board of Trade and executive vice president of the Oklahoma Grain & Feed Association.

The Enid Board of Trade is an organization of seven grain firms located in Enid. Its storage capacity is in excess of 75 million bushels. Their main purpose in the grain marketing system is for the storing, blending, and conditioning of grain.

The Oklahoma Grain & Feed Association, the State agribusiness trade association, represents approximately 210 firms with over 350 facilities in Oklahoma whose storage capacity is in excess of 250 million bushels. Their main purpose is to store and market grain for the producer. Of these firms, approximately one-half of the firms are independently owned and one-half are cooperatively owned.

Typically, Oklahoma grain firms are oriented toward long-term storage rather than high throughput. Research has shown that high throughput facilities are more susceptible to fires and explosions than those with low throughput. We, therefore, believe that

OSHA should recognize this important aspect of the Oklahoma grain industry.

Both organizations are deeply concerned with safety, as is OSHA. As indicated in our previous testimony at the OSHA public hearings in Kansas City and Dallas, these organizations will continue to stress the need for safety to our membership and will continue to support the efforts of the National Grain & Feed Association in promoting safety research, education, and training within the grain industry, as well as in the American Feed Manufacturers Association.

We cannot emphasize enough the economic hardship that will be placed upon the Oklahoma elevator and feed mill operator should these standards be enacted. The country elevator facilities are in direct competition with the producer who has onfarm storage.

Since these standards will not apply to producers, and since the country elevator could not pass back the cost of compliance to such producer, he would therefore very likely have to close his doors. This would consequently cause an economic hardship on the producer who does not have onfarm storage. He would be forced to either build onfarm storage himself or to haul his grain to market a much greater distance than what he does today.

The number of elevators available for the producer to deliver and market his grain will be greatly reduced should these standards be adopted as written. The country elevator simply does not operate on a large enough margin to be able to absorb the cost of the compliance. In addition, the Oklahoma wheat producer and the Oklahoma agribusinessmen presently are facing a depressed agricultural economy. We feel there is consequently a much greater risk of grain elevator employees losing their jobs due to the depressed economic conditions rather than to fires and explosions in Oklahoma.

Members of our association have presented testimony in both the Kansas and Dallas hearings and will present additional testimony here today that will verify the problems and significant costs of compliance to their particular operation.

We urge the Senate Labor Committee to contact these people about the specifics involved. We support their views. Applying their problems and costs statewide to the Oklahoma grain and feed industry would represent a tremendous initial outlay and annual outlay of funds.

A review of the mass of data surrounding these standards has yet to prove that these exorbitant costs of compliance to Oklahoma grain and feed facilities will have any more impact upon the safety of the industry employees than what is currently being done under the present standards and with educational and safety training efforts.

I would like to go into about five of the areas that we feel are very significant, and one of them is housekeeping. OSHA's insistence on emphasizing the complete elimination of grain dust is not the proper solution to the problem since the complete removal of dust in a grain handling facility is unachievable and scientific data has shown there is no proper "safe" level of grain dust.

Grain dust explosions are a complex phenomena and additional research must be undertaken to explore the interaction of the

three basic elements of an explosion: Ignition source, fuel, and oxygen.

The mistaken focus upon the impossible task of removing grain dust will not solve the problem and will, therefore, be extremely costly and unnecessary.

We urge OSHA to allow grain handling facilities to implement their own housekeeping program using a written plan that specifies which areas need to be cleaned and the frequency of checking and cleaning. The one-eighth inch dust level as proposed has no scientific nor technical merit, which makes it a meaningless figure.

The standards as written explicitly imply that both dust removal and airborne emission control methods would be any part of a housekeeping program. Thus, the grain handling facility is going to have to both sweep the facility and install dust control equipment, and this is not necessary, especially at the country elevator level.

In the bucket elevator area, the definition of "partially inside" bucket elevators is much too restrictive. Within the past 5 years, many of our members have installed "partially inside" legs by OSHA's definition which, at the time they were installed, were thought to be outside legs. We agree with the National Grain & Feed Association that this definition needs to be changed.

There has been numerous testimony presented by grain industry personnel nationwide that points to the fact that motion detection devices presently available on the market are unsatisfactory. In most cases, firms who had them installed have since had them removed. Until technology becomes available to improve upon their performances, motion detection devices should not be a mandatory requirement.

We believe that periodic examination routine and bearing temperature devices are a much better means of detecting problem areas in the belt and leg area.

It also has been pointed out that interlocking devices required to shut down conveyors would be impossible for an existing grain handling facility to achieve unless it is totally automated.

On grates. We believe that overwhelming evidence has been presented that shows the impracticality and uselessness of the 2.5- by 2.5-square-inch grate opening requirement. Obviously, this criteria was developed from unscientific data and was never tested in the field of operation for practicality. This 2.5- by 2.5-inch requirement will no doubt cause many more problems for the employee than it will prevent and will cause the time it takes to unload the producer's truck to be lengthened considerably.

Emergency escapes. OSHA already regulates emergency escapes under its general industry standards. The need for these exits is based upon the size, arrangement and occupancy of the area. The proposed standard would no longer allow exits to be placed upon this criteria.

Unfortunately, the path of an explosion inevitably follows through tunnels and work areas. Reseach has indicated that a flame front can spread through a gallery at the rate of 250 feet per second. It would therefore seem highly unlikely that escape from an explosion in such an area could be achieved with an additional exit.

In addition, the nature of the construction of steel storage tanks and flat storage facilities makes this requirement unnecessary and unwarranted as well.

On bin entries. Many bins and silos, such as steel or concrete tanks and flat storage, do not present entry hazards, as they are entered from the ground level. They are generally entered through large ground doors for emptying and cleaning purposes. The nature of their construction and use eliminates the danger of toxic or combustible gases and of entrapment and suffocation. There is no need to tie up additional elevator personnel to observe and monitor employee entry into such structures, nor to mandatory test the atmosphere for toxic conditions.

We believe management should have the right to determine which bins would require mandatory atmospheric testing and bin entry permit.

In closing, the Enid Board of Trade and Oklahoma Grain & Feed Association urge OSHA to grant special considerations to exempt small existing grain handling facilities who have annual throughput of 10 million bushels or less. In addition, we believe the following relief should be provided for all facilities:

Elimination of arbitrary housekeeping criteria.

Exempt all outside and "partially outside" bucket elevators for all facilities.

Exempt small and existing and nonautomated facilities from the requirement that motion switches or bucket elevators be interlocked with conveyor.

Exempt small facilities from bearing relocation and monitoring requirements.

Exempt all existing facilities from the proposed bucket elevator belt alignment devices.

Eliminate the emergency escape requirement.

Eliminate the 2.5- by 2.5-square-inch grate requirement.

Allow employers to designate which bins require special entry procedures.

We have left the statistical and technical aspects of the standards up to the capable hands of our national associations. We do want to make it clear, however, that the standards as presently written will cause an unnecessary and extreme financial burden upon our membership.

The standards regarding the housekeeping, bucket elevators, grates, emergency escapes, and bin entry are based upon unproven and insufficient technical data.

The analysis of OSHA data indicates that while 14.5 percent of the deaths from fires and explosions have occurred in country elevators during the study period. OSHA estimates that 32 percent of the total cost of compliance would be borne by country elevators alone.

The annualized cost of these proposed standards would be 101 percent of before-tax profit for the country elevators. Results from reports of eight of our members with average storage capacity of 868,000 bushels indicates their average initial cost per firm would be $343,168 and their average annual cost would be $75,113.

We sincerely hope that the Senate Labor Committee will urge OSHA to reexamine their data, redetermine their cost/benefit

ratios and reapply their requirements out in the field to verify their practicality and necessity.

It seems highly unlikely that any new OSHA standards could improve upon the safety record the industry has experienced the past 6 years. We therefore concur with the Office of Management and Budget report which points out that the risk from fires and explosions estimated by OSHA for U.S. grain handling facilities are upwardly biased and were developed from an unrepresentative data.

The industry is committed to protect the lives of its employees working within the grain handling facility. We do not need specific, unproven standards to improve such safety.

We provide safety seminars, speakers at annual meetings and safety news published in our monthly newsletter to over 400 subscribers. We believe research, safety education, information and training are the best solutions to the problem. We support safety rules that are practical and affordable and have been proven to be effective.

We hope that OSHA will make the recommended changes in these standards. Our industry's survival, particularly at the country elevator level, depends upon these changes.

Thank you.

[The prepared statement of Mr. Hampton and response to questions of Senator Nickles follows:]

STATEMENT OF THE
ENID BOARD OF TRADE
AND
OKLAHOMA GRAIN & FEED ASSOCIATION

MY NAME IS JOE NEAL HAMPTON AND I AM GENERAL MANAGER OF THE ENID BOARD OF TRADE AND EXECUTIVE VICE PRESIDENT OF THE OKLAHOMA GRAIN AND FEED ASSOCIATION. I HAVE BEEN EMPLOYED IN THIS POSITION FOR 9 YEARS. PRIOR TO THIS PERIOD I RECEIVED MY M.S. IN AGRICULTURAL ECONOMICS FROM OKLAHOMA STATE UNIVERSITY. I ALSO HAVE WORKING EXPERIENCE IN ELEVATORS AND A FLOUR MILL. THE ENID BOARD OF TRADE IS AN ORGANIZATION OF SEVEN GRAIN FIRMS LOCATED IN ENID, OKLAHOMA WHOSE STORAGE CAPACITY IS IN EXCESS OF 75 MILLION BUSHELS. THEIR MAIN PURPOSE IN THE GRAIN MARKETING SYSTEM IS FOR THE STORING, BLENDING AND CONDITIONING OF GRAIN. THE OKLAHOMA GRAIN AND FEED ASSOCIATION, A STATE AGRIBUSINESS TRADE ASSOCIATION, REPRESENTS APPROXIMATELY 210 FIRMS WITH OVER 350 FACILITIES IN OKLAHOMA, WHOSE STORAGE CAPACITY IS IN EXCESS OF 250 MILLION BUSHELS. THEIR MAIN PURPOSE IS TO STORE AND MARKET GRAIN FOR THE PRODUCER. OF THESE 210 PLUS FIRMS, APPROXIMATELY ½ THE FIRMS ARE INDEPENDENTLY OWNED BY PRIVATE CORPORATIONS, PARTNERSHIPS, OR INDIVIDUALS WHILE THE OTHER ½ ARE COOPERATIVELY OWNED BY PRODUCERS. TYPICALLY, OKLAHOMA GRAIN FIRMS ARE ORIENTED TOWARDS LONG TERM STORAGE RATHER THAN HIGH THROUGHPUT. OUR GRAIN ELEVATOR FIRMS HAVE RATHER LARGE BUSHEL CAPACITIES AND SMALL ANNUAL THROUGHPUT. RESEARCH HAS SHOWN THAT HIGH THROUGHPUT FACILITIES ARE MORE SUSCEPTABLE TO FIRES AND EXPLOSIONS THAN THOSE WITH LOW THROUGHPUT. WE THEREFORE URGE OSHA TO RECOGNIZE THIS IMPORTANT ASPECT OF THE OKLAHOMA GRAIN INDUSTRY.

BOTH ORGANIZATIONS ARE AS DEEPLY CONCERNED WITH SAFETY AS IS THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. AS INDICATED IN OUR PREVIOUS TESTIMONY IN KANSAS CITY, MISSOURI, AND DALLAS, TEXAS, THESE ORGANIZATIONS WILL CONTINUE TO STRESS THE NEED FOR SAFETY

TO OUR MEMBERSHIP, AND WILL CONTINUE TO SUPPORT THE EFFORTS OF THE NATIONAL GRAIN AND FEED ASSOCIATION IN FROMOTING SAFETY RESEARCH, EDUCATION AND TRAINING.

WE CANNOT EMPHASIZE ENOUGH THE ECONOMIC HARDSHIP THAT WILL BE PLACED UPON THE OKLAHOMA ELEVATOR AND FEED MILL OPERATOR SHOULD THESE STANDARDS BE ENACTED AS PROPOSED. THE COUNTRY ELEVATOR FACILITIES ARE IN DIRECT COMPETITION WITH THE PRODUCER WHO HAS ON-FARM STORAGE. SINCE THESE STANDARDS WILL NOT APPLY TO PRODUCERS WITH ON-FARM GRAIN HANDLING FACILITIES, AND SINCE THE COUNTRY ELEVATOR COULD NOT PASS BACK THE COST OF COMPLIANCE TO SUCH PRODUCER, HE WOULD THEREFORE VERY LIKELY HAVE TO CLOSE HIS DOORS. THE COUNTRY ELEVATOR SIMPLY DOES NOT OPERATE ON A LARGE ENOUGH MARGIN TO BE ABLE TO ABSORB THE COST OF COMPLIANCE.

IN ADDITION, THE OKLAHOMA WHEAT PRODUCER AND THE OKLAHOMA AGRIBUSINESSMAN PRESENTLY ARE FACING A DEPRESSED AGRICULTURAL ECONOMY. WE FEEL THERE CONSEQUENTLY IS A MUCH GREATER RISK OF GRAIN ELEVATOR EMPLOYEES LOSING THEIR JOBS DUE TO THESE DEPRESSED ECONOMIC CONDITIONS RATHER THAN TO FIRES AND EXPLOSIONS.

MEMBERS OF OUR ASSOCIATION HAVE PRESENTED TESTIMONY AT BOTH THE KANSAS CITY, MISSOURI, AND DALLAS, TEXAS, PUBLIC HEARINGS, AND WILL PRESENT ADDITIONAL TESTIMONY HERE TODAY THAT WILL VERIFY THE PROBLEMS AND SIGNIFICANT COSTS OF COMPLIANCE TO THEIR PARTICULAR OPERATION. WE URGE THIS COMMITTEE TO CONTACT THESE PEOPLE ABOUT THE SPECIFICS INVOLVED. OUR ASSOCIATION SUPPORTS THEIR VIEWS. APPLYING THEIR

PROBLEMS AND COSTS STATEWIDE TO THE OKLAHOMA GRAIN AND FEED INDUSTRY WOULD REPRESENT A TREMENDOUS INITIAL OUTLAY AND ANNUAL OUTLAY OF FUNDS. A REVIEW OF THE MASS OF DATA SURROUNDING THESE STANDARDS HAS YET TO PROVE THAT THESE EXHORBINANT COSTS OF COMPLIANCE TO OKLAHOMA GRAIN AND FEED FACILITIES WILL HAVE ANY MORE IMPACT UPON THE SAFETY OF THE INDUSTRY EMPLOYEES THAN WHAT IS CURRENTLY BEING DONE UNDER THE PRESENT STANDARDS AND WITH EDUCATIONAL AND SAFETY TRAINING EFFORTS. TO PUT THIS IN ANOTHER PERSPECTIVE, THE COST TO THESE FACILITIES DOES NOT JUSTIFY THE BENEFIT TO BE GAINED. THESE PARTICULAR STANDARDS DO NOT PROVIDE THE FLEXIBILITY NECESSARY FOR THE GRAIN FACILITY TO MEET SAFETY HAZARDS. EACH FACILITY IS CONSTRUCTED A LITTLE DIFFERENT, AND A SPECIFIC RIGID SET OF STANDARDS WOULD THEREFORE BE HIGHLY IMPRACTICAL AND INEFFECTIVE.

HOUSEKEEPING

OSHA'S INSISTENCE ON EMPHASIZING THE ELIMINATION OF GRAIN DUST IS NOT THE PROPER SOLUTION TO THE PROBLEM, SINCE (A) THE COMPLETE REMOVAL OF GRAIN DUST IN A GRAIN HANDLING FACILITY IS UNACHIEVABLE, AND (B) SCIENTIFIC DATA HAS SHOWN THERE IS NO PROPER "SAFE" LEVEL OF GRAIN DUST. GRAIN DUST EXPLOSIONS ARE A COMPLEX PHENOMENA, AND ADDITIONAL RESEARCH MUST BE UNDERTAKEN TO EXPLORE THE INTERACTION OF THE THREE BASIC ELEMENTS OF AN EXPLOSION - IGNITION SOURCE, FUEL, AND OXYGEN. THE MISTAKEN FOCUS UPON THE IMPOSSIBLE TASK OF REMOVING GRAIN DUST WILL NOT SOLVE THE PROBLEM, AND WILL THEREFORE BE AN EXTREMELY COSTLY AND UNNECESSARY.

WE URGE OSHA TO ALLOW GRAIN HANDLING FACILITIES TO IMPLEMENT THEIR OWN HOUSEKEEPING PROGRAM USING A WRITTEN PLANT THAT SPECIFIES

WHICH AREAS NEED TO BE CLEANED AND THE FREQUENCY OF CHECKING AND CLEANING. THE 1/8" DUST LEVEL HAS NO SCIENTIFIC NOR TECHNICAL MERIT, WHICH MAKES IT A MEANINGLESS FIGURE. YOU CAN'T CONTROL THE UNCONTROLLABLE.

THE STANDARDS AS WRITTEN EXPLICITELY IMPLIES THAT BOTH DUST REMOVAL AND AIRBORNE EMISSION CONTROL METHODS WOULD BE PART OF ANY HOUSEKEEPING PROGRAM. THUS, THE GRAIN HANDLING FACILITY IS GOING TO HAVE TO BOTH SWEEP THE FACILITY AND INSTALL DUST CONTROL EQUIPMENT. THIS IS NOT NECESSARY ESPECIALLY AT THE COUNTRY ELEVATOR LEVEL.

BUCKET ELEVATORS (LEGS)

THE DEFINITION OF "PARTIALLY INSIDE" BUCKET ELEVATORS IS MUCH TOO RESTRICTIVE. WITHIN THE PAST 5 YEARS, MANY OF OUR MEMBERS HAVE INSTALLED "PARTIALLY INSIDE" LEGS BY YOUR DEFINITION WHICH, AT THE TIME THEY WERE INSTALLED, WERE THOUGHT TO BE OUTSIDE LEGS FOR OSHA PURPOSES. WE AGREE WITH THE NATIONAL GRAIN AND FEED ASSOCIATION THAT THIS DEFINITION NEEDS TO BE CHANGED.

THERE HAS BEEN NUMEROUS TESTIMONY PRESENTED BY GRAIN INDUSTRY PERSONNEL NATIONWIDE THAT POINTS TO THE FACT THAT MOTION DETECTION DEVICES PRESENTLY AVAILABLE ON THE MARKET ARE UNSATISFACTORY. IN MOST CASES, FIRMS WHO HAD THEM INSTALLED HAVE SINCE HAD THEM REMOVED. UNTIL TECHNOLOGY BECOMES AVAILABLE TO IMPROVE UPON THEIR PERFORMANCES, MOTION DETECTION DEVICES SHOULD NOT BE A REQUIREMENT. WE BELIEVE A PERIODIC EXAMINATION ROUTINE AND BEARING TEMPERATURE DEVICES ARE A MUCH BETTER MEANS OF DETECTING PROBLEM AREAS IN THE BELT AND LEG AREAS.

IT HAS ALSO BEEN POINTED OUT THAT INTERLOCKING DEVICES REQUIRED TO SHUT DOWN CONVEORS WOULD BE IMPOSSIBLE FOR AN EXISTING GRAIN HANDLING FACILITY TO, ACHIEVE UNLESS IT IS TOTALLY AUTOMATED.

IN GENERAL, MANY OF THE REQUIREMENTS IN THE BUCKET ELEVATOR AREA ARE IMPRACTICAL, UNNECESSARY AND COSTLY.

GRATES

WE BELIEVE THAT OVERWHELMING EVIDENCE HAS BEEN PRESENTED THAT SHOWS THE IMPRACTICALITY AND USELESSNESS OF THE 2.5" X 2.5" GRATE OPENING REQUIREMENT. OBVIOUSLY, THIS CRITERIA WAS DEVELOPED FROM UNSCIENTIFIC DATA, AND WAS NEVER TESTED "IN THE FIELD" OF OPERATION FOR ITS PRACTICALITY. THIS 2.5" X 2.5" REQUIREMENT WILL NO DOUBT CAUSE MANY MORE PROBLEMS FOR THE EMPLOYEES THAN IT WILL PREVENT, AND WILL CAUSE THE TIME IT TAKES TO UNLOAD THE PRODUCER'S TRUCK TO BE LENGTHENED CONSIDERABLY.

TRAMP METAL HAS NOT BEEN A SIGNIFICANT PROBLEM FOR BULK GRAIN HANDLING FACILITIES IN OKLAHOMA.

EMERGENCY ESCAPE

OSHA ALREADY REGULATES EMERGENCY ESCAPES UNDER ITS GENERAL INDUSTRY STANDARDS. THE NEED FOR THESE EXITS IS BASED UPON THE SIZE, ARRANGEMENT, AND OCCUPANCY OF THE AREA. THE PROPOSED STANDARD WOULD NO LONGER ALLOW EXITS TO BE PLACED BASED UPON THIS CRITERIA.

UNFORTUNATELY, THE PATH OF AN EXPLOSION INEVITABLY FOLLOWS THROUGH TUNNELS AND WORK AREAS. RESEARCH HAS INDICATED THAT A FLAME FRONT CAN SPREAD THROUGH A GALLERY AT THE RATE OF 250 FEET PER SECOND. IT WOULD THEREFORE SEEM HIGHLY UNLIKELY THAT ESCAPE FROM AN EXPLOSION IN SUCH AN AREA COULD BE ACHIEVED WITH AN ADDITIONAL EXIT. THEREFORE, THE REQUIREMENT THAT THE EMPLOYER MUST PROVIDE AT LEAST TWO MEANS OF ESCAPE FROM THESE AREAS SEEMS QUITE UNNECESSARY. IT WILL NOT IMPROVE SAFETY TO ANY APPRECIABLE DEGREE.

IN ADDITION, THE NATURE OF THE CONSTRUCTION OF STEEL STORAGE TANKS AND FLAT STORAGE FACILITIES MAKES THIS REQUIREMENT UNWARRENTED AS WELL.

BIN ENTRY

MANY BINS AND SILOS -- SUCH AS STEEL OR CONCRETE TANKS AND FLAT STORAGE -- DO NOT PRESENT ENTRY HAZARDS. THEY GENERALLY ARE ENTERED THROUGH LARGE GROUND LEVEL DOORS FOR EMPTYING AND CLEANING PURPOSES. THE NATURE OF THEIR CONSTRUCTION AND USE ELIMINATES THE DANGER OF TOXIC OR COMBUSTIBLE GASES AND OF ENTRAPMENT AND SUFFOCATION. IN THESE INSTANCES, THERE IS NO NEED TO TIE UP ADDITIONAL ELEVATOR PERSONNEL TO OBSERVE AND MONITOR EMPLOYEE ENTRY INTO SUCH STRUCTURES, NOT TO MANDATORY TEST THE ATMOSPHERE FOR TOXIC CONDITIONS.

WE BELIEVE MANAGEMENT SHOULD HAVE THE RIGHT TO DETERMINE WHICH BINS WOULD REQUIRE MANDATORY ATMOSPHERE TESTING AND BIN ENTRY PERMIT.

CONCLUSION

IN CLOSING, THE OKLAHOMA GRAIN AND FEED ASSOCIATION URGES OSHA TO GRANT SPECIAL CONSIDERATIONS TO EXEMPT SMALL EXISTING GRAIN HANDLING

FACILITIES WHO HAVE ANNUAL THROUGHPUT OF 4 MILLION BUSHELS OR LESS. IN ADDITION, WE BELIEVE THE FOLLOWING RELIEF BE PROVIDED FOR ALL FACILITIES.

-ELIMINATION OR ARBITRARY HOUSEKEEPING CRITERIA

-EXEMPT ALL OUTSIDE AND "PARTIALLY INSIDE" BUCKET ELEVATORS FOR ALL FACILITIES

-EXEMPT SMALL, EXISTING, AND NON AUTOMATED FACILITIES FROM THE REQUIREMENT OR MOTION SWITCHES ON BUCKET ELEVATORS BE INTERLOCKED WITH CONVEYOR

-EXEMPT SMALL FACILITIES FROM BEARING RELOCATION AND MONITORING REQUIREMENTS

-EXEMPT ALL EXISTING FACILITIES FROM THE PROPOSED BUCKET ELEVATOR BELT ALIGNMENT DEVICES

-ELIMINATE THE EMERGENCY ESCAPE REQUIREMENT

-ELIMINATE THE 2.5 SQUARE INCH GRATE OPENING REQUIREMENT

-ALLOW EMPLOYERS TO DESIGNATE WHICH BINS REQUIRE SPECIAL ENTRY PROCEDURES

WE HAVE LEFT THE STATISTICAL AND TECHNICAL ASPECTS OF THE STANDARDS UP TO THE CAPABLE HANDS OF OUR NATIONAL ASSOCIATIONS. WE DO WANT TO MAKE IT CLEAR, HOWEVER, THAT THE STANDARDS, AS PRESENTLY WRITTEN, WILL CAUSE AN UNNECESSARY AND EXTREME FINANCIAL BURDEN UPON OUR MEMBERSHIP. WE BELIEVE THE PROPOSED OSHA STANDARDS REGARDING HOUSEKEEPING, BUCKET ELEVATORS, GRATES, EMERGENCY ESCAPES, AND BIN ENTRY ARE BASED ON UNPROVEN AND INSUFFICIENT TECHNICAL DATA, WILL DEFINITELY NOT BE COST-EFFECTIVE, AND WILL BE EXTREMELY COSTLY TO THE INDUSTRY, EVEN TO THE POINT OF CAUSING MANY SMALL FIRMS TO GO OUT OF BUSINESS. ANALYSIS OF OSHA DATA INDICATES THAT WHILE 14.5% OF DEATHS FROM FIRES AND EXPLOSIONS HAVE OCCURED IN COUNTRY ELEVATORS DURING THE STUDY PERIOD, OSHA ESTIMATES THAT 32% OF THE TOTAL COST OF COMPLIANCE WITH THE PROVISIONS WOULD BE BORNE BY COUNTRY ELEVATORS ALONE. THE ANNUALIZED COST OF THESE PROPOSED STANDARDS WOULD BE 101% OF BEFORE-TAX PROFIT FOR COUNTRY ELEVATORS (135% FOR THOSE WITH LESS THAN 10 EMPLOYEES). RESULTS FROM REPORTS FROM 8 OF OUR MEMBERS WITH AVERAGE

STORAGE CPACITY OF 868,000 BUSHELS INDICATES THEIR AVERAGE INITIAL COST PER FIRM WOULD BE $343,168 AND THEIR AVERAGE ANNUAL COST WOULD BE $75,113 (FOR THE HOUSEKEEPING, BUCKET ELEVATOR, EMERGENCY ESCAPE, GRATES, AND BIN ENTRY PROVISIONS).

WE SINCERELY HOPE THAT OSHA WILL RE-EXAMINE THEIR DATA, RE-DETERMINE THEIR COST/BENEFIT RATIOS, AND RE-APPLY THEIR REQUIREMENTS "OUT IN THE FIELD" TO VERIFY THEIR PRACTICALITY AND NECESSITY. IT SEEMS HIGHLY UNLIKELY ANY NEW OSHA STANDARDS COULD IMPROVE UPON THE SAFETY RECORD THE INDUSTRY HAS EXPERIENCED THE PAST 6 YEAR PERIOD (1978-83). THE 1976-77 PERIOD THAT WAS INCLUDED IN THE OSHA BASELINE DATA IS NOT REPRESENTATIVE OF THE IMPROVED SAFETY RECORD THE INDUSTRY HAS ACHIEVED SINCE 1978. THE 1978-83 PERIOD PROVIDES A MUCH MORE ACCURATE PICTURE OF THE INDUSTRY SAFETY ENVIRONMENT. WE THEREFORE CONCUR WITH OMB[1] REPORT WHICH POINTS OUT THAT THE RISKS FROM FIRES AND EXPLOSIONS ESTIMATED BY OSHA FOR U.S. GRAIN HANDLING FACILITIES ARE UPWARDLY BIASED AND WERE DEVELOPED FROM AN UNREPRESENTATIVE DATA.

OSHA ALREADY APPLIES A STRICT SET OF REGULATIONS - THE GENERAL INDUSTRY STANDARDS - TO GRAIN HANDLING FACILITIES. WE BELIEVE IT IS OF LITTLE VALUE TO ESTABLISH ADDITIONAL, MORE RIGID STANDARDS THAT HAVE LITTLE SCIENTIFIC NOR TECHNICAL MERIT.

THE INDUSTRY IS COMMITTED TO PROTECT THE LIVES OF IT'S EMPLOYEES WORKING WITHIN THE GRAIN HANDLING FACILITY. WE DO NOT NEED SPECIFIC, UNPROVEN STANDARDS TO IMPROVE SAFETY. OUR ORGANIZATIONS SUPPORT SAFETY. WE PROVIDE

1/Office of Management and Budget, OSHA's Proposed Standards for Grain Handling Facilities, April, 1984.

SAFETY SEMINARS, SPEAKERS AT ANNUAL MEETINGS, AND SAFETY NEWS PUBLISHED IN OUR MONTHLY NEWSLETTER TO OVER 400 SUBSCRIBERS. WE BELIEVE RESEARCH, SAFETY EDUCATION, INFORMATION, AND TRAINING ARE THE BEST SOLUTIONS TO THE PROBLEM. WE SUPPORT SAFETY RULES THAT ARE PRACTICAL AND AFFORDABLE, AND HAVE BEEN PROVEN TO BE EFFECTIVE.

WE HOPE THAT OSHA WILL MAKE THE RECOMMENDED CHANGES IN THE STANDARD MADE BY OUR MEMBERS, OUR ASSOCIATION, THE NATIONAL GRAIN AND FEED ASSOCIATION, THE AMERICAN FEED MANUFACTURERS ASSOCIATION, AND THE GRAIN ELEVATOR AND PROCESSING SOCIETY. OUR INDUSTRY'S SURVIVAL -- PARTICULARLY AT THE COUNTRY ELEVATOR LEVEL -- DEPENDS UPON THESE CHANGES.

RESPECTFULLY SUBMITTED,

JOE NEAL HAMPTON

Joe N Hampton

GENERAL MANAGER

EXECUTIVE VICE PRESIDENT

Organized 1898

OKLAHOMA GRAIN AND FEED ASSOCIATION

2309 N. 10th
P. O. BOX 1747
PH. 405-233-9516
ENID, OKLAHOMA 73702

July 25, 1984

JUL 3

Senator Don Nickles
Senate Labor Sub Committee
713 Senate Hart Building
Washington, D.C. 20510

Dear Senator Nickles:

In reference to the OSHA hearing held recently in Yukon, Oklahoma, concerning their proposed grain elevator safety standards, you asked me to comment on deaths from grain elevator explosions in Oklahoma. To the best of my knowledge, there have been no such deaths in Oklahoma in the last 10 years as a result of a dust explosion.

We appreciate your interest in this matter, as the economic impact of these standards upon the country elevator in Oklahoma would be devastating.

If we can be of further assistance, please don't hesitate to give our office a call.

Most sincerely,

Joe N. Hampton
Executive Vice President

Senator NICKLES. Thank you very much, Mr. Hampton. I appreciate your input. I believe you also attended the hearings in Dallas and Kansas City?

Mr. HAMPTON. Yes, sir.

Senator NICKLES. What was your impression of those hearings?

Mr. HAMPTON. At a recent Dallas hearing, our panel of grain elevator operators and myself presented our testimony and we were drilled by the OSHA attorneys, by the union attorneys for approximately 3 hours, and was apparent to me that the people who wrote these standards have never been to a country elevator.

The questions that they asked and the details they went into, it is just obvious that whoever has advised them and whoever wrote the standards was not very familiar with the workings of a country elevator and I believe we are going to get some relief in the grate area.

They seem to think or realize that they made a big mistake in that area.

Senator NICKLES. As far as requiring the 2½ inch——

Mr. HAMPTON. Yes.

Senator NICKLES [continuing]. Squares?

Mr. HAMPTON. Yes. I think they are going to change that to have it 2½ inches in one direction, which I would guess, from a 2- to 3-inch area of 90 percent of the Oklahoma elevators already have the 2½-inch requirement one way.

Senator NICKLES. Were they just convinced that a little bit of commonsense would tell them that you would be stacking up all kinds of grains and trucks and people——

Mr. HAMPTON. That is correct.

Senator NICKLES [continuing]. If you had it that type?

Mr. HAMPTON. I think they are also going to give some relief on the definition of a partially inside bucket elevator, to change that, and also think they may give some relief to the bin entry to steel on the flat storage facility.

But the big cost of all the compliances is going to be in the dust control area, in the housekeeping and installing dust control equipment and we tried to tell them that it is not needed at the country elevator level. But I don't know what is going to happen.

Senator NICKLES. You told them the country elevators would just basically open up the windows and there really wasn't a problem?

Mr. HAMPTON. Well, as I said in my testimony, the main thing in Oklahoma at the country elevator level is they don't have a lot of high throughput. They take the producer's grain in at harvest time, and sure, there is dust for maybe a 2-week period, but after that, they don't create as much dust as a high throughput terminal export facility would.

Senator NICKLES. You mentioned, when you were talking about the housekeeping provisions, that the rule they have for the complete removal of grain dust in the grain handling facility is unachievable. I think in their proposal they have two or three different options. One would be to clean it every shift. Did they ever say what a shift was?

Mr. HAMPTON. No. They did not. But the way the standard was written, they told us—we implied we could do—you could either sweep or install dust control systems. But if you go to the stand-

ards and read them, it explicitly says that you have to have a housekeeping plan and you have to control the airborne emissions.

And the only way you are going to control the airborne emissions to zero level is to put in pneumatic dust control and then you are going to have to have a housekeeping program as well. So you have to do both things.

Senator NICKLES. You mentioned some figures on how much it would cost, I think something like $343,000. Is that on a country elevator?

Mr. HAMPTON. Yes. I had—I just took randomly eight firms that had sent me—we sent out a worksheet to elevators in Oklahoma and had them figure their cost of compliance and then send these costs in to OSHA and I just randomly took eight firms that I had on file and their average storage capacity was about 868,000 and that is what their average initial cost was, $343,000. That is the capital outlay that was nonrevenue producing and many firms would just close their door rather than having to put that much money out.

Senator NICKLES. Let me get into that expense.

How much of that would be for a dust collector?

Mr. HAMPTON. Senator, I think there are a couple of witnesses coming after me. One of them was in Dallas, Lester Bond, and he has gone through and he will give you an idea what it would cost his facility. I would say probably one-third to one-half of that $343,000 would be for dust control.

Senator NICKLES. And the rest of it would be primarily for sweeping and having somebody in all the time?

Mr. HAMPTON. Probably at least half. He will be able to give you a detailed cost of what it cost his facility.

Senator NICKLES. You mentioned, that in your opinion, the grain elevator operators could not pass that on. We may hear from some people today who will say they would pass it on, it is just going to mean lower prices for farmers. I think you mentioned in your statement it would be an expense that couldn't be passed on to grain farmers.

Mr. HAMPTON. Well, you know, it couldn't be passed on to those—it would be difficult if you are in an area of a lot of producer on-farm storage because the producer is not going to have to comply with that and if the elevator would have to lower his price to the producer 5 or 10 cents a bushel, the producer could either probably build on farm storage or even have to absorb it.

So one way or the other, the producer is going to have to pay for it.

Senator NICKLES. Primarily because of the fact that these regulations would not apply to onfarm storage?

Mr. HAMPTON. That is correct.

Senator NICKLES. Do you think these regulations should apply to onfarm storage?

Mr. HAMPTON. I don't think they should apply to anybody.

Senator NICKLES. I was hoping you would answer in that way. Primarily because of that, you think if an elevator operator tells them it will cost a nickel or a dime—if it would cost that much per bushel—they will use their own storage and not mess with the other?

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Mr. HAMPTON. That could—that is one option that could happen. And then on the other one is, you know, some producers cannot do that and they would just be receiving that much less for their product and they certainly don't need that.

Senator NICKLES. In your summation you wanted to eliminate many of the provisions. Do you feel like we should eliminate the entire proposal?

Mr. HAMPTON. Well, yes in these five areas I addressed. Now in the proposal, OSHA did have some recommendations that, you know, for instance they had a requirement that you have to have a permit system before there is hot work done in the elevator, which I think that makes good sense. You shouldn't have somebody out there welding in the elevator unless you know about it, because that is a good way to cause a fire.

Senator NICKLES. What does the permit system mean?

Mr. HAMPTON. Well, that is something very widely used today. Let's say an elevator needs repair in the facility. Before a welder goes in there, he must go to the manager and get his permission to go in there and do this welding, and of course, the manager will shut the elevator down to make sure there is no dust being made at that time and watch it real close, because that is—that has proven to be a very good way to start a fire in the facility, hot work and welding done in an elevator.

And the elevator manager doesn't want a welder going in there without him knowing it, doing work.

Senator NICKLES. Is there a permit required right now?

Mr. HAMPTON. I am not certain about that, but I know that—I would say 99 percent of the elevator operators have one of their own, anyway.

Senator NICKLES. That is the reason I was asking. Do we need an OSHA regulation to tell us to do that or is it being done anyway?

Mr. HAMPTON. I would say it is being done anyway.

Senator NICKLES. You mentioned you wanted to exempt a lot of the small facilities. Is it your opinion that the larger elevators like Union Equity's and others, should have these types of additional requirements put upon them by OSHA?

Mr. HAMPTON. No, I don't, because the method that the regulations were written, most of the large facilities already have dust control and they implement a lot of these plans and they need to have the flexibility to get the job done on their own and they don't need a specific rigid set of standards that are—that give no flexibility to do your job.

And the housekeeping requirement, you know, that needs to be completely thrown out because they are saying you have got to have a one-eighth inch. Well, why did they pick one-eighth? It has no scientific merit whatsoever.

Senator NICKLES. You can expose them with a sixty-fourth or a sixteenth or something else?

Mr. HAMPTON. That is correct.

Senator NICKLES. Mr. Hampton, I appreciate your comments and the fact that you have been following these other hearings. I think it has been helpful to me and the committee as well.

Mr. HAMPTON. Thank you. On behalf of the Grain Institute, we certainly appreciate your interest in this and we will be glad to work with you to try to get something done. Thank you.

Senator NICKLES. Thank you very much. Our next panelist is Loyal George, coordinating compliance officer with Union Equity Co-Operative Exchange in Enid.

STATEMENT OF LOYAL GEORGE, SAFETY COORDINATOR FOR UNION EQUITY COOPERATIVE EXCHANGE, ENID, OK

Mr. GEORGE. Ladies and gentlemen, it is a privilege for me to come here to witness to you here today. I am Loyal George, safety coordinator for Union Equity, with division headquarters in Enid, OK.

This job includes the responsibility and safety of 175 grain elevator employees at a 50 million bushel plant in Enid, OK, 15 million bushel plant in Fort Worth, TX and an 8½ million bushel export plant located on the Houston Ship Channel.

We have never had an employee killed by a fire or grain explosion in 58 years of handling and merchandising grain, both inland and water front. In my opinion, the proposed rules for grain handling facilities are unnecessary and to comply with them is cost prohibitive.

The general duty regulations written by Occupational Safety and Health Administration, Department of Labor, already covers the safety of employees in grain elevators. Why duplicate these regulations?

Union Equity Co-Operative Exchange has a safety program. This consists of one annual safety meeting held on company time with dinner furnished. All elevator employees are required to attend and a permanent record is kept. All six elevator superintendents hold monthly safety meetings at their individual elevators.

Written instructions along with verbal training are furnished for all new employees, whether permanent or temporary. All employees must sign a statement that he has read these instructions before beginning work.

Hot work permits within the—hot work within the elevator is discouraged, however we do use hot work permits which must be signed by the individual elevator superintendent plus the maintenance superintendent. The plant must completely shut down, plus complete cleanup of the hot work area with the proper safety watch completed after the work.

Bin entry permits are used. Individual elevator superintendents must be notified and their signature on the permit before anyone is allowed to enter a bin.

All elevators have a written copy of emergency evacuation procedures. Union Equity has a no smoking rule within the elevator. No one smokes inside the elevator.

Outside contractors working inside our elevators are required to follow the same rules as our employees.

I would specifically like to comment on some of the proposed rules. First, housekeeping.

Housekeeping, as defined in the proposed rules for grain elevator facilities, are not necessary for Union Equity. In order to keep our

elevators reasonably clean, a housekeeping inspection program is used.

The general manager receives a report every 30 to 60 days in writing from the compliance coordinating office. The elevator superintendent is directly responsible for housekeeping. He and his assistant make inspections every day and assign work at the beginning of each day.

It is just simply impossible to clean and sweep all the square feet in one of our elevators every shift. In our six terminal elevators, we have a million and a half square feet or approximately 33 acres to keep clean.

It is difficult to tell someone in a rule how to complete this task. It is estimated the cost would be almost $3 million per year to sweep one time per shift, plus $880,000 for pneumatic cleaning equipment, or $3.8 million dollars the first year to comply.

The proposed regulations require no visible dust emission from pneumatic control systems. This is an impossible requirement. We have spent over 2½ million plus added operating cost equipment to make our elevators safer and cleaner to work in.

One-eighth inch action level for fugitive dust is not desirable. No predetermined amount of accumulation of dust is acceptable to live with. It will take both manual and pneumatic control to keep a grain elevator reasonably clean.

The cost to comply of inside bucket elevating legs would be $67,000. We have tried motion sensors that were too sensitive, which shut the leg off when it wasn't necessary. We have adjusted the time delay then the leg shut off too late.

Bin eyes to control too much material flowing into the elevating leg has proved effective to us. We also use the correct size of heater coils for motor amperage to protect our legs from overloading.

Static electricity has not proven to be a hazard in our bucket elevating legs. MSHA-approved conductive grain belt has been installed. Leg motors are electrically grounded. We agree inspection ports on both head and boot sections are necessary, but to comply with OSHA is prohibitive.

Safety is very important in caring for bucketing elevators. Third, emergency escape proposed rules means the egress from scale floors—in most cases, this is a small area not over 40-foot square. Normally only one man works here.

He is provided with either a cage or belt lift with a ladder close by. A second means of egress would require an outside ladder which couldn't be very far from the inside ladder and much more dangerous to climb than staying on the scale floor for help to arrive.

Most scale floors are designed with no flammable material, therefore, I see no need for a second means of egress in the head house area. To meet these proposed rules would cost $20,000.

Fourth, grain elevators will experience problems if grates are reduced to 2½ by 2½ size requirements. On a number of commodities, someone would have to stand by and rake the grain and foreign material to let proper flow through the grate.

Openings should be designed for the flow of the material. Magnets are hard to design to handle 20,000 to 30,000 bushels per hour

receiving belts, especially if the load is 6 to 7 inches deep. To put in overlay on our present grating would cost $10,000.

I have estimated that the initial cost in complying with proposed rules would be $1,146,878. The annual operating cost would be increased by $3.6 million. That makes a total of $4.8 million, which we would have to pass on to the producer, which is already being taxed by low prices for his products.

We have got to cut operating costs instead of increasing them. In my observation, these rules should not be adopted as proposed, but a greater effort should be promoted to preventive maintenance. This would require emphasis on dust control, ignition sources, which in turn would reduce explosion hazards.

Preventive maintenance would also improve efficiency with less unplanned down time, more efficient operation, and a safer operation.

It is the recommendation of Union Equity that National Grain & Feed Association be counseled and their expertise gained from national research be used to formulate any rules pertaining to grain elevators.

Thank you, Senator Nickles.

[The prepared statement of Mr. George follows:]

UNION EQUITY CO-OPERATIVE EXCHANGE
2300 N. 10TH — BOX 3408
ENID, OKLAHOMA 73702-3408
PHONE (405) 233-5100
CABLE CODE: UNECO — TELEX 747169

July 3, 1984

Senator Don Nickles
Chairman Subcommittee on Labor
215 Dean McGee Avenue
Oklahoma City, Oklahoma

Reference: Proposed Rulemaking, Grain Handling Facilities
Occupational Safety and Health Administration
Department of Labor

Attention: Jo Stansberry

Dear Senator:

I am Loyal George, Safety Coordinator for Union Equity Co-Operative Exchange, with division headquarters in Enid, Oklahoma. This job includes responsibility for the safety of 175 grain elevator employees at a 50,000,000 bushels plant in Enid, Oklahoma, a 15,000,000 bushels plant in Ft. Worth, Texas and a 8,500,000 bushels export plant located on the Houston, Texas ship channel. I have been employed by Union Equity for 42 years. This included the construction of most of the storage in Enid, Oklahoma, 7 years as assistant superintendent, 16 years as elevator superintendent, then 15 years as safety compliance coordinator.

We have never had an employee killed by a fire or grain dust explosion in 58 years of handling and merchandising grain both inland and water front. In my opinion, the proposed rules for Grain Handling Facilities are unnecessary and to comply with them is cost prohibitive. The general duty regulations, written by Occupational Safety and Health Administration, Department of Labor, already covers the safety of employees in grain elevators. Why have duplicate regulations?

Union Equity Co-Operative Exchange has a safety program. This consists of one annual safety meeting held on company time with dinner included. All elevator employees are required to attend and a permanent record is kept of who did attend. All six elevator superintendents hold a monthly safety meeting at their individual elevators. Minutes of these meetings are kept on file. Different employees are assigned daily closing time walk through inspection, which is also in writing and kept on file. These inspections are discussed at the monthly safety meetings with all the employees. First Aid and CPR training sessions are held each year. Those attending receive a certificate which is good for three years, then it must be renewed.

Written instructions along with verbal training are furnished for all new employees whether permanent or temporary. Each employee must sign a statement that he has read these instructions before beginning work.

Hot Work within the elevator is discouraged, however, we do use Hot Work permits which must be signed by the individual elevator superintendent plus the maintenance superintendent. The plant must be completely shut down plus a complete clean up of the Hot Work area with the proper safety watch following completion of the work.

Bin entry permits are used; individual elevator superintendents must be notified and their signature on the permit before anyone is allowed to enter a bin.

All elevators have a written copy of Emergency Evacuation Procedures. This includes a diagram of each plant. Each new employee is instructed on what to do in case of an emergency, along with written instructions. All employees are instructed on Emergency alarm system. A copy of alarm signals are posted throughout the elevators for quick communications.

Union Equity has a no smoking rule within the elevator. No one smokes inside the elevator.

Outside contractors working inside our elevators are instructed in the same rules applying to our employees. The contractor is instructed to coordinate his work with elevator superintendent to insure that his men are safe and the elevator environment is also safe.

Housekeeping, as defined in the new proposed rules for grain elevator facilities, are not necessary for Union Equity. In order to keep our elevators reasonably clean, a housekeeping inspection program is used. The general manager receives a report every 30 to 60 days in writing from the compliance coordinating office. The elevator superintendent is directly responsible for housekeeping. He and his assistant make inspections every day to assign work at the beginning of each day. It is just simply impossible to plan to sweep all the square feet in one of our elevators every shift. In our six terminal elevators, we have 1,469,478 square feet or 33.73 acres to keep clean. It is very difficult to tell someone in a rule how to complete this task. It is estimated the cost would be $2,929,024 per year to sweep one time per shift, plus $880,800 for pneumatic cleaning equipment or $3,809,824 the first year to comply. Proposed regulations require no visible dust emission with pneumatic dust control systems. This is an impossible requirement. We have spent over $2,482,784 plus added operating cost of equipment to make our elevators safer and cleaner to work in. 1/8 inch action level for fugitive grain dust is not desirable. No predetermined amount of accumulation of dust is acceptable to live with. It will take both manual and pneumatic dust control to keep a grain elevator reasonably clean.

The cost to comply with Inside Bucket elevating legs would be $67,170. We have tried motion sensors that were too sensitive, which shut the leg off when it wasn't necessary. When we adjusted time delay then it was too late. Bin eyes to control too much material entering into the leg has proven effective for us. We also use the correct size heater coils for motor amperage to protect our legs from overloading. Static electricity has not proven to be a hazard in our bucket elevating legs. MSHA approved conductive

grain belt has been installed. Leg motors are electrically grounded. We agree inspection ports on both head and boot sections are necessary, but to comply with OSHA is prohibitive. Safety is very important in caring for bucket elevating legs. In fact, it is a hard and fast rule that our legs are manually inspected every 40 hours of operation. Bearings are checked each shift. Belt alignment is checked each shift. Manual inspection of bearings and alignment are much more effective than sensors. All operators have written instructions not to jog an elevating grain belt.

The emergency escape proposed rule requires two means of egress for scale floors. In most cases, this is a small area not over 40 feet square. Normally only one man works here. He is provided with either a cage or belt lift with a ladder close by. A second means of egress would require an outside ladder which couldn't be very far from the inside ladder and much more dangerous to climb than staying on the scale floor for help to arrive. Most scale floors are designed with no flamable material, therefore, I see no need for a second means of egress in the head house area. To meet these proposed rules would cost $20,893.

Grain elevators will experience problems if grates are reduced to 2 1/2 x 2 1/2 size requirements. On a number of commodities, someone would have to stand by and rake the grain and foreign material to let proper flow through the grate. Openings should be designed for the flow of material handled. Magnets are hard to design to handle 20,000 and 30,000 bushels per hour receiving belts, especially if the load is 6 to 7 inches deep. To put in overlay on our present grating, it would cost $10,602.

I have estimated that the initial cost in complying with the proposed rules would be $1,146,878 and the annual operating costs would increase by $3,699,074. This makes a total of $4,845,952, which would have to be passed on to the producer, who is already being taxed by low prices for his products. We have got to cut operating costs instead of increasing them.

In my observation, these rules should not be adopted as proposed, but a greater effort should be promoted to preventive maintenance. This would require emphasis on dust control, ignition sources, which in turn would reduce explosion hazards. Preventive maintenance would also improve efficiency with less unplanned down time, more efficient operation and a safer operation.

Sincerely,

Thomas L. George

Thomas L. George
Union Equity Co-Operative Exchange
Coordianting Officer

TLG:emw

Senator NICKLES. Thank you very much, Mr. George. We appreciate your statement to the committee. How long have you been the coordinating compliance officer for Union Equity?

Mr. GEORGE. Fifteen years.

Senator NICKLES. You said that Union Equity has never had a fatality in relation to a grain explosion?

Mr. GEORGE. That is correct. That is in 58 years.

Senator NICKLES. Have you had grain explosions in that time?

Mr. GEORGE. We have never had a grain explosion. We have had grain spill out of a bin, but with no explosion.

Senator NICKLES. Somewhere in your statement you mention that you have already spent $2.5 million to try and make your elevators safer and cleaner. You have been doing this for several years.

Mr. GEORGE. That is true.

Senator NICKLES. Are they safer and cleaner today than they were in 1977 or 1978?

Mr. GEORGE. I definitely feel that we have improved the condition. Yes, sir.

Senator NICKLES. Did you put in the air cleaners and dust collectors? When did you install those?

Mr. GEORGE. We had most of our filter—bag house filters, if that is what you are referring to, installed by 1974.

Senator NICKLES. Have you made other improvements in the last few years?

Mr. GEORGE. We have added more since that time. We have also increased protection by making guards on particular equipment: hand rails; rails for getting up, approaching stairways, that sort of expense.

Senator NICKLES. You have done these things without OSHA telling you to do it?

Mr. GEORGE. What I am saying is, we are already covered by these rules that OSHA is trying to dictate especially for grain elevators. We are covered in the general duty clause of the OSHA regulation already.

Senator NICKLES. Do you think those are sufficient?

Mr. GEORGE. They are as far as I am concerned, yes, sir.

Senator NICKLES. Is there anything worth saving in the proposed regulations?

Mr. GEORGE. No, sir.

Senator NICKLES. I am not surprised. You mentioned in your statement that manual inspection of bearings and alignment are more effective than the sensors. How often do you think those inspections need to be made for them to be effective?

Mr. GEORGE. At the present time we inspect our bearings at least every 8 hours. If we find a bearing that is giving us a problem, it is checked more periodically than that, but we do walk out each one of our plants every 8 hours.

Senator NICKLES. It is your opinion that these costs would really be passed on to the producers.

Mr. GEORGE. That is my opinion, yes.

Senator NICKLES. You heard an earlier statement that onfarm storage does not have to comply with those and there might be a large increase in onfarm storage. Do you think that might happen?

Mr. GEORGE. That is happening to us already.

Senator NICKLES. Has it?

Mr. GEORGE. Yes, sir.

Senator NICKLES. Some of the statements we have heard today say we should just change these regulations as they deal with the country elevators.

In other words, they have said they shouldn't apply to country elevators. They will put country elevators out of business. Union Equity is a large elevator and it does a lot of business. How would you respond to this statement?

Mr. GEORGE. Well, I am not fighting country elevators or small elevators, but in my opinion, they probably affect more people by applying to the small elevators than they would large elevators. In fact, there are numerous small elevators. There are probably more people in the small elevators than there are in large elevators. Does that answer the question?

Senator NICKLES. I will note your comment and come back to it later. Do you think we should come up with an exemption just for small elevators? That wouldn't solve your problem.

Mr. GEORGE. No. That wouldn't solve our problems.

Senator NICKLES. Would it make you spend a bunch of money in a way that, in your opinion, would not make the elevator any more safe?

Mr. GEORGE. I don't believe we would be any more safe than we are at the present time.

Senator NICKLES. What you are saying is that you shouldn't just have an exemption for small elevators. You need to do away or change these proposals substantially.

Mr. GEORGE. Yes, sir.

Senator NICKLES. OK. Thank you very much for your statement.

Our next panelist is Dan Isbell, manager of Imo Farmers Co-Op.

Mr. Isbell, we appreciate your coming.

STATEMENT OF DAN ISBELL, MANAGER, FARMERS CO-OP ELEVATOR CO., ENID, OK

Mr. ISBELL. Thank you, sir. My name is Dan Isbell and I am manager of the Farmers Cooperative Elevator Co., Route 3, Enid, OK.

Our capacity is 335,000 bushels. We handle approximately 750,000 bushels of grain per year. This means we have to receive and ship grain with speed and safety in the summer.

As I studied the proposed rules of the Occupational Safety and Health Administration for grain handling facilities, it seems to me it would not be cost effective for these additions.

We employ four people full time. The cost would run about $10,000 per person to implement these rules.

On housekeeping, to keep one man sweeping our facility each shift, which is 9 hours, it would cost an additional $9,400 a year. This would amount to approximately 1¼ cents per bushel of grain handling.

We have two full-time employees outside of the office which handles the grain, feed, fertilizer, and the cleaning of seed. Most of this is seasonal and there are not enough margins to handle the additional costs.

On the grates, the proposed standard would require that all receiving pits were covered by grates with a maximum of 2½ by 2½ openings.

This would cost our elevator approximately $14,520 to fix. This would not be cost effective. This would also slow down the receiving of grain at our country elevator and take more out of our margin. In our area the grain comes to the country elevator fast and we are expected to handle it that way, fast.

The smaller openings in our pits would not significantly reduce the chance of dropping foreign materials and objects into the pit.

On motion detectors. The problem with motion detectors is getting one that will work. The one we installed either worked all the time or not at all. The total cost to our elevator would be approximately $3,450 and additional maintenance problems. If we installed thermal detection systems for bearings, our cost would be $3,400, plus another $4,000 for belt alignment detectors. I might add that we have initiated a mechanism in our elevator that stops the flow of grain in the pit if something happens, if a bin runs over or something, and it sounds an alarm plus a horn, and we would still have time to get our legs shut down.

On the emergency escape. We have a ladder on one of our elevators and to add another to our old elevator would cost about $6,000. This elevator has an elevator and ladder on the inside, which we feel is sufficient for an escape ladder.

In all, it would cost our association approximately $37,370 to be in compliance with OSHA's rules. In my opinion, as I say, it would not be cost effective since it would cost our producers approximately 6 cents a bushel margin.

And I think—I don't believe that you can legislate an employer's moral responsibility to his employees. Thank you, sir.

Senator NICKLES. Thank you, Mr. Isbell. You have a small elevator in Garfield County?

Mr. ISBELL. Yes, sir.

Senator NICKLES. And you employ four people?

Mr. ISBELL. Four full-time employees.

Senator NICKLES. How old is the elevator?

Mr. ISBELL. One was built in 1920 and the other in 1950 and the other in 1962.

Senator NICKLES. Have you ever had any explosions?

Mr. ISBELL. No, sir.

Senator NICKLES. You came up with a cost that we tried to do at different times, trying to figure out how much this would cost per bushel. You mentioned at the conclusion of your statement it might cost 6 cents?

Mr. ISBELL. I took my 750,000 by 6 cents. That is about the grain we receive during the year.

Senator NICKLES. The grain you receive and put through your elevator, and you just figured up what the cost would be in compliance.

Mr. ISBELL. Yes, sir. Divided by the bushels and that was it.

Senator NICKLES. Divided by the bushels and came out with about 6 cents.

Mr. ISBELL. Yes.

Senator NICKLES. Would you have to eat that, or would it come out of your back pocket or come out of the farmers' back pocket?

Mr. ISBELL. I would imagine it would eventually come out of the farmers' pocket.

Senator NICKLES. If you had to eat it, as your margin——

Mr. ISBELL. If we had to eat it, we would lose money.

Senator NICKLES. Would you stay in business if you lose money?

Mr. ISBELL. Not very long.

Senator NICKLES. We have heard many people say, and I think it is important, that if these things go into play, it would put them out of business.

We have heard other people say that the farmers would pay it and we already have a lot of farmers who are going out of business. They are having a hard time with wheat selling for $3.40 and if they have the price knocked down to 6 cents, or something like that, you are talking about a pretty significant reduction in income.

Mr. ISBELL. They have been hit hard enough and I don't think that they need to be hit any more.

Senator NICKLES. I want to look at some of these figures you have. You do 750,000 bushels annually?

Mr. ISBELL. Yes, sir. That is an average. We are one of the smaller elevators in Garfield County.

Senator NICKLES. Do you think that would affect most of the small elevators in a similar way?

Mr. ISBELL. I think it would, sir.

Senator NICKLES. Granted, they are costly at 6 cents a bushel. We have seen some reports of a couple hundred thousand, but as costly as they are, do you think they would increase the safety of your elevator?

Mr. ISBELL. We have been working on the safety of our elevator for the last 27 years. As long as I have been there. We have got rails on our head houses and on the work floors. We have improved our legs. Like I say, we have made our own type of motion sensors—it is not a motion sensor in effect, but it works.

We have spent quite a bit of money over the past several years trying to make it safer and we don't think this would help any.

Senator NICKLES. It wouldn't help any? It would cost a lot of money, but really wouldn't make any difference?

Mr. ISBELL. But I don't think it would make it any safer, no.

Senator NICKLES. OSHA's current proposal calls for small elevator facilities to comply with housekeeping provisions by July 1, 1988, while July 1, 1985 would be the compliance deadline for larger facilities. Would that extended compliance date for smaller facilities help you that much?

Mr. ISBELL. I don't think so. I don't think so.

Senator NICKLES. Do you think there should be an exemption just for the country elevators, or do you think we need to look at the proposals for everything?

Mr. ISBELL. I think the whole thing needs to be looked at.

Senator NICKLES. All right. Mr. Isbell, we appreciate your testimony before the committee today.

Mr. ISBELL. Thank you, sir.

Senator NICKLES. Thank you. Our next panelist is Lester Bond who is manager and director for the Oklahoma Grain & Feed Association from Weatherford. Mr. Bond, we appreciate your coming from Weatherford this morning.

STATEMENT OF LESTER BOND, GENERAL MANAGER, FARMERS CO-OP EXCHANGE, WEATHERFORD, OK

Mr. BOND. Thank you, Senator Nickles. My name is Lester Bond. I am general manager of the Farmers Co-Op Exchange, Weatherford, OK. I have been manager for 34 years.

Our association has storage capacity of 2½ million bushels, with a yearly throughput of 2 million.

Our space consists of 725,000 bushels of upright concrete storage and six steel tanks comprising 1½ million bushels. We have three inside legs and three partially inside legs.

I am concerned with some of the proposed regulations and with some of the definitions as outlined in the Federal Register as published on January 6, 1984 concerning proposed rules.

We are probably one of the first country elevators to install motion detection devices on our inside legs. I served on a task force for Farmers Elevator Mutual Insurance Co. some 8 or 9 years ago. This was an insurance company which is now Farmland Insurance Co.

As a result of being on this task force, I came back to our local elevator and had motion detection devices installed on all of our inside legs.

We have not had satisfactory results with these devices. We are now on our third set of these. The first ones that we installed were on the work floor where the idler pulleys were and these proved unsatisfactory.

Then we installed new ones in the boot, located on the belt itself, and these were not satisfactory, either. We have since installed another brand on the belt adjacent to the boot, but have had varying results with these. These motion detection devices require a great deal of adjustment and every time we have to have a millwright or installer come out and adjust these for us. This has proven to be rather expensive.

As for having these motion detection devices installed, and interlocked, a lot of our cases this would be impossible because we are running wheat out of a bin that is free flowing or is running by gravity flow and there is no way that you can interlock every bin that is free flowing into a system.

We have some bins that, of course, are fed by conveyor belts and these could be interlocked, but we have 370,000 bushels of space that is free flowing and you cannot install an interlocking device into this type of operation.

My next concern is the definition of a small elevator facility, which means a grain elevator which has less than 1 million bushel storage capacity and less than 4 million bushel throughput during the previous 12-month period.

Under this definition, we would be classified as something other than a small elevator facility because we have storage capacity of 2¼ million bushels. Yet, of this 2¼ million bushels, only 725,000

bushels is of upright concrete storage, and you simply do not have the dust problems and other associated problems with steel tanks.

All of our storage has aeration systems in connection with them and once harvest is concluded, we simply turn on the aeration and do not turn or move this grain again until it is loaded out. By not turning or moving this grain, we have not created any dust problems, but yet, we would not be classified as a small elevator facility under their definition because of our storage capacity.

I do not feel that this is fair or justifiable, as most of our space consists of steel tanks. Our primary purpose in the grain industry is to take in grain at harvest time, store this grain for the farmers until such time as he markets this grain. We are not a facility that handles grain every day, or one that turns grain, thus creating dust problems.

In regard to the proposed housekeeping rules as outlined in the Federal Register, we would find these unnecessary regulations for us to abide by as we are not involved in a day-to-day basis with running our elevator and adding to the dust problems.

In a normal course of operations, we receive wheat during June for about a 3-week period and then we receive milo or grain sorghums for about a 2-week period during October. The rest of the months, we may go for as long as a 30-day period without turning on our elevator because we are primarily a storage unit and because we have aeration systems on all of our bins.

To require us to sweep our facility each day that we operate would mean that it would cost us $13,500 additional costs each year. We have approximately 9,000 square feet that would require sweeping 200 times each year per 9-hour shift, or 1,800 hours at $7.50 per hour.

I am sure that everyone does not have the same insurance company that we have, but Farmland Mutual is our insurance company and their inspector comes by bimonthly and checks all of our facilities, and if he finds an accumulation of dust, he writes us up. Or, for that matter, anything else that he finds not in compliance, he informs us of these items and this receives our prompt attention.

These inspectors are trained to detect items which are unsafe practices and keeps our elevator personnel informed of them, as well as myself. In addition, we have a yearly inspection by a representative of the Agricultural Marketing Service, or Federal examiners, as we are a federally licensed facility

One of the things they are looking for when they make an examination is cleanness, and if something is out of line, they note it on their examination report and we are required to correct it and make a written report on same.

We also have a State seed, feed, and fertilizer inspector who works with the EPA, who makes semiannual inspections. He is looking for the same items, such as dust accumulations, and if he finds such, he makes a written report and we are required to correct same and submit a written report, reporting that it has been corrected.

What I am saying is that with all these people inspecting our facilities, from twice a year to six times a year, we have to do a good

job of housekeeping, or we would not be able to pass all these inspections.

I also read into this that we would have to install a pneumatic dust control system so that no visible dust emissions would be coming from the stock handling system. This, to me, would be completely impossible, as this is something that could not be achieved. But to install a pneumatic dust system to minimize fugitive grain dust, we feel that we would have to have a system which would handle 9,000 cfm and would require us to install systems on the three inside legs that we have.

We have checked with our millwright that works for us and also checked the guidelines from National Feed and Grain and have figured that this system alone would cost about $54,000. Again, now, this is a system that would only be used when we are receiving grain or when we are loading out grain, so on a day-to-day basis we are talking about using this system less than 100 days per year.

Speaking again of our insurance company, they provide a safety meeting once a year for all of our employees and in this meeting they stress good housekeeping and other safe practices. I require all of my employees to attend this meeting.

In addition to this, we have various other safety meetings during the year which my employees attend. In the 67 years that our company has been in operation, we have never had a fire, explosion or fatality. I think this speaks well for the safety program that we have for our employees and the feeling of safety that is instilled in our employees by our insurance representatives.

Since we are primarily in the storage operation and not high throughput, we feel that the cost of complying with these provisions would not be beneficial to us and would just add to our costs of operations, which we would not be able to recover from our farmer-owners.

I also have a lot of problems with the requirement of the 2½-inch square grate openings. In our operations we receive all of our grain from farmers, direct from the field, and this contains a lot of "cheat." Some years there will be as much as 15 or 20 percent in some of these loads.

Even with the openings that we now have, 2½ inches by 9 foot, we sometimes have to rake this grain back and forth to get it to flow through the grates into the pit. In milo harvest in the fall, we receive a lot of grain that contains maize stalks and grain pummies.

We have a considerable amount of problems with the openings that we now have in getting this to flow through. If we had to have only an opening of 2½-inch square, there is no way that we could handle the farmers' grain without spending a lot of time and manpower in getting the grain to flow through into the dump pit.

I have calculated that if we would have to comply with all the regulations as proposed, such as bin entry, grates, inside and partially inside legs, emergency escape and housekeeping, that our initial costs would be $105,540, and our annual recurring cost would be $17,600.

I feel that these figures are very conservative, as I have checked these costs with our millwright and used the guidelines from National Feed and Grain.

One thing that adds to these costs is that the millwright charges from $25 to $30 an hour for their services, whereas we have computed our recurring costs at only $7.50.

In summary, I feel that small and existing country elevators should be exempt from the proposed regulations because the cost of compliance and the annual recurring costs would be economically unfeasible and so many of the regulations are impractical. If you examine our kind of operations, primarily storage operations, these standards are totally unnecessary. Thank you.

Senator NICKLES. Thank you very much, Mr. Bond. I appreciate your statement and knowing the size of your elevator. You mention exempting the small elevators and also making the changes in the grates and a couple of other changes.

Do you think we should keep some of the proposals that have been made?

Mr. BOND. I have heard you ask the other people that question and I have gone through the Federal Register and I tried to find one thing in there that I thought we should keep and I was unable to do so.

Senator NICKLES. I appreciate that. Are there others in the audience that would like to have a copy of the proposed regulations? I have asked my staff to obtain more copies to be passed out after the hearing.

Are you currently trying motion detector devices?

Mr. BOND. Yes, sir. We are on our third set now.

Senator NICKLES. You haven't had very much luck?

Mr. BOND. No. Every time you have to take a leg up or adjust it, then you have got to reset the things and as Mr. George testified, they will go off indiscriminately and sound a warning and then you have to rush over there and nothing has happened. Everything is right and so you finally get a false sense of not trusting the device because they are not accurate as of this date.

Now there may be some in the market that we are not aware of, but we are on our third set.

Senator NICKLES. I appreciate your concern. You also mentioned that you felt like the small elevators got hit because the amount of throughput—no, because the storage capacity is——

Mr. BOND. Storage capacity.

Senator NICKLES [continuing]. 2¼ million bushels, but yet you don't have that much throughput. Plus you mentioned that well over half of your storage was in steel tanks.

Mr. BOND. Yes, sir.

Senator NICKLES. Steel tanks don't have the problem of the old concrete?

Mr. BOND. No, sir, you don't have a head house on a steel tank and you don't have a Texas galley, or you don't have a tunnel. The only thing you have is an outside leg that elevates the grain into that bin and when you start shipping it out, the only thing you have is an auger system underneath the bin. There is nothing there to be cleaned. Everything is outside. But they are looking at total storage capacity and disregarding the type of storage that you have.

Senator NICKLES. OK. You also think the old concrete elevators, where you have the head house and the lower areas which have a

lot of cleaning up and, I think in Union Equity's statement they mention several acres that they——

Mr. BOND. Thirty-three, I think.

Senator NICKLES [continuing]. Would have to sweep every shift, could be prohibitive. It would be pretty expensive even for the smaller ones with the concrete facilities.

Mr. BOND. In our case—which we only have 725,000 bushels of concrete, our yearly cost would be $13,500 to require to sweep once a shift in a small facility like ours.

Senator NICKLES. Thank you very much for your statement.

On our next panel is George Hulver, general manager of Farmers Cooperative Grain Dealers Association, and also Paul Jantz who is the director of service for Farmers Cooperative Grain Dealers Association. They are both from Enid.

I appreciate you both joining me earlier this morning.

Mr. HULVER. Thank you, Senator.

STATEMENT OF GEORGE HULVER, GENERAL MANAGER, FARMERS COOPERATIVE GRAIN DEALERS ASSOCIATION OF OKLAHOMA

Mr. HULVER. Senator Nickles, I am George Hulver, general manager of the Farmers Cooperative Grain Dealers Association of Enid, OK.

We are a service organization for 112 cooperative grain elevators located primarily in Oklahoma and a few in the Panhandle of Texas.

My remarks here this morning is to provide more information regarding an overall safety program, because I knew that you were going to have many of them talk on the specifics of the law.

Now, our organization provides a broad variety of services to our membership. We feel that one of our most important services is our emphasis on employee safety. We work very closely with Farmland Mutual Insurance Co., who writes the insurance for most of the cooperative grain elevators in our area. We sponsor and jointly hold the safety meetings and equally share the expense in holding these meetings.

Now our interest in safety is not new and it predates the Occupational Health and Safety Administration Act by many, many years. We started holding these meetings in 1956 and have had our spring elevator employee meetings for 28 consecutive years. This past spring in April and May we held 14 safety meetings for the local and regional cooperative employees.

These were evening dinner meetings held geographically throughout the State to make it convenient for all employees to attend, and not just a few key employees. Most of the cooperatives were represented at these meetings, with a total of 895 employees attending. Overall safety was emphasized by our speakers, with emphasis on grain elevator safety.

We also hold three evening dinner safety meetings in the fall of the year for the cotton gins, just ahead of their ginning season.

In addition, our fieldmen are certified with the Red Cross to teach the multimedia standard first aid to certify employees in first aid, which is required by OSHA for business in hazardous op-

erations. These are all-day meetings and we hold five of these during the year.

We also hold educational meetings for managers, and on many occasions have speakers talk on grain operation safety. We endeavor to keep our membership informed on Government regulations, and so forth, that affect cooperatives, and we have a continuous flow of informational letters to our membership, and many of these letters have information in regard to grain elevator safety.

I have not tried to make any specific suggestions, since, as I indicated, the managers and others will give testimony with regard to OSHA proposals. My purpose here is to show that an organized effort has been made for many, many years by the grain industry to provide a safe working place for employees.

Very few grain dust explosions have occurred in Oklahoma due to the exceptional cooperation by management in implementing these sensible work standards. We understand the interest that OSHA has in grain elevator safety.

Certainly we would ask that good judgment be used in making recommendations considering their overall effectiveness and the cost of implementing these proposals. However, I would have to say that it seems to me that it would be difficult for country elevators particularly, and even the regionals, to comply with these recommendations, and I would feel that we are doing a good job and have for a long time and they are very interested in safety, providing a safe workplace, and I really can't see any reason that OSHA should be involved in this.

Senator NICKLES. Thank you very much, Mr. Hulver. Please proceed, Mr. Jantz.

Mr. JANTZ. Thank you, Senator Nickles. My remarks will reaffirm the statement that Mr. Hulver has made.

STATEMENT OF PAUL JANTZ, DIRECTOR OF SERVICE FOR FARMERS COOPERATIVE GRAIN DEALERS ASSOCIATION, ENID, OK

Mr. JANTZ. I am Paul Jantz, director of service for Farmers Cooperative Grain Dealers Association, and as Mr. Hulver mentioned, we are a service organization for cooperatives throughout the State of Oklahoma and the Texas Panhandle.

We provide a variety of services to our cooperative members in the grain industry. One of the most important services is providing safety information concerning the safety of employees.

We do this by providing safety information and holding employee safety meetings throughout the State where it is convenient for every employee of a cooperative to attend these meetings.

These safety meetings are designed to stress the importance of working safely in grain elevators and other high risk jobs. We use films and slide presentations to emphasize a need for the employee to have the proper attitude in providing a safe working place for themselves and their fellow employees. At each of these meetings we stress the potential hazards of grain dust explosions within a grain handling facility. This is done by an actual demonstration of a controlled grain dust explosion.

Since 1977 and 1978 when there was a series of devastating explosions, the grain industry has taken it upon themselves to review

their safety regulations in their plants and have embarked on stringent safety programs.

The insurance industry also, in cooperation with the grain industry, increased their inspection of the grain handling facilities and offered professional advice and recommendations to the operators of grain elevators. This to minimize the hazards of a potential grain dust explosion.

Many of the proposed OSHA regulations concerning grain handling facilities have been already implemented by the grain trade, such as employee training, permit systems for hot work, and bin entry. Housekeeping has always been a major emphasis in controlling grain dust within the grain handling facility.

Many grain elevators have also installed mechanical devices, such as motion sensors and heat indicators, which have not proved successful, due to the tremendous maintenance requirements. We have no research data that these devices, even if kept operating properly, would prevent a dust explosion.

It is difficult for us in the grain industry to concede that the proposed recommendations of the OSHA administration will eliminate the hazard of a grain dust explosion.

The estimated cost to implement these recommendations would be immense, and the increased operating costs would be increased substantially. We also feel that proper research has not been done to see if they are feasible in preventing grain dust explosions.

I think we all know that the ultimate cost of these recommendations will be borne by the people who can least afford it, the farmer and the consumer.

It is my opinion that the rules and regulations should not be adopted as proposed. I think a more effective approach has been taken by the grain industry itself, through research, safety education, and training programs.

The grain industry has always put the safety of its employees first and foremost. I feel the industry is in a better position, because of their daily involvement, to provide safe working places for the employees.

The grain industry, like many other industries, has become so bogged down with Government regulations, that the cost of doing business has forced many small operators out of business and these proposed regulations could force many other operators to close their doors. This I do not feel should be permitted, when our Nation is faced with a continual decline in productivity.

Thank you, Senator.

Senator NICKLES. Thank you. Either one of you can answer this question. You both work with the Farmers Co-Op Grain Dealers Association. That represents what percent of the grain in Oklahoma?

Mr. HULVER. Over half. Paul?

Mr. JANTZ. I would say over 50 percent. Over half.

Senator NICKLES. And you have been conducting these safety seminars and so on. Has there been anything similar done for the independent elevators?

Mr. JANTZ. Yes, sir.

Senator NICKLES. Through an organization?

Mr. JANTZ. They have an organization, too, the—in Oklahoma, the Oklahoma Grain & Feed Dealers Association.

Senator NICKLES. OK.

Mr. HULVER. The gentleman that spoke to you first handles that.

Senator NICKLES. All right. Mr. Jantz, you mentioned earlier, and it was interesting to me, about having the demonstration explosion.

Mr. JANTZ. Yes.

Senator NICKLES. Tell us about that. Do you do this once a year or something?

Mr. JANTZ. We do this in our safety meeting, Senator. We hold safety meetings annually throughout the State, and we hold them at different locations, as mentioned, so it is convenient for each employee. One of the things that we try to promote in our safety meetings, is to instill in the mind of the employee the importance of safety. He has to have the proper attitude to want to work safely in his job, and we do this by stressing how dangerous and how—how powerful a grain dust explosion can be.

And we have what is called a dust explosion chamber. It is made out of heavy plexiglass so they can watch this. We take a sample of dust from the elevator, use a heat bulb for ignition——

Senator NICKLES. A light bulb?

Mr. JANTZ. Yes, kind of like a light bulb for heat for ignition and then we have this air tube that we blow in to put this dust in suspension.

We have a paper diaphragm on top of the explosion chamber and, from a teaspoonful of grain dust, we get a tremendous dust explosion.

But we have to recognize that all of the ingredients: the air, oxygen; and the fuel, which would be the dust; and the ignition, all have to be in the right proportion to get a grain dust explosion. Even though we try to control one and we feel like we have the ultimate factors, we still get a bummer every once in a while. So——

Senator NICKLES. Do you mean by a bummer that you are not able to get a——

Mr. JANTZ. We don't get an explosion.

Senator NICKLES. You try to mix it up in the right proportions or something, but you are still not able to get an explosion? Have you had members of your association that have had explosions?

Mr. JANTZ. Not in the grain elevators. I can't recall——

Senator NICKLES. Not in the grain elevators?

Mr. JANTZ. I can't recall of a dust explosion in a grain elevator. Well, we have had a minor one.

Mr. HULVER. We have had a minor—minor ones, and some in the feed mills.

Mr. JANTZ. Yes. But we have in the feed mills.

Senator NICKLES. How long ago were those?

Mr. JANTZ. We had a minor dust explosion in a grain elevator probably 6, 7 months ago. Northeastern Oklahoma.

Senator NICKLES. Was it serious injury?

Mr. JANTZ. No injuries and minimal damage to the facility.

Senator NICKLES. No fatality? So the thrust of your statement and the statement of your association is that these rules and regulations proposed by OSHA are overburdensome?

Mr. HULVER. It certainly would be, Senator.

Senator NICKLES. Too costly?

Mr. HULVER. Too costly, and we feel that a real program is already in effect through the association, the management and the insurance companies that work with them. In other words, there is a lot of work that has been done for many, many years on this.

Senator NICKLES. Long before OSHA came on the scene——

Mr. HULVER. You bet.

Senator NICKLES [continuing]. And you have reasons to conduct those safety programs and work with the insurance companies, anyway, regardless of whether or not the regulations are strengthened specifically for this industry?

Mr. HULVER. That is right.

Senator NICKLES. I appreciate your comments. I also appreciate your joining me at the visit to the Yukon Elevator earlier this morning. Thank you very much.

Mr. JANTZ. Thank you very much.

Mr. HULVER. Thank you.

Senator NICKLES. Our next group represents farmer groups. We have Jimmie Jarrell representing the Oklahoma Farmers Union and Ron Voth representing the Oklahoma Wheat Growers Association.

I think I will split the two farming groups up, if that is OK, and just do two at a time. Mr. Jarrell, would you care to proceed?

STATEMENT OF JIMMIE JARRELL, PRESIDENT, OKLAHOMA FARMERS UNION, OKLAHOMA CITY, OK

Mr. JARRELL. Thank you, sir. Mr. Chairman, Senator, my name is Jimmie Jarrell, the president of the Oklahoma Farmers Union, a general farm organization in Oklahoma.

You have a copy of my written statement and I would like to make one correction in it. The next to the last paragraph, the last page, correction from half a million dollars to $40 million for cost of installing equipment.

I am sure that there will be several people reading my statement, at least I hope that there will be. Now I am not going to read the statement, but just want to make a few brief comments.

My concern, and we appreciate your concern, Senator, for holding this hearing today, because it does show that you are interested and care about us down here in the country elevator and out on the farm. We are concerned about the extreme cost of implementing these particular procedures.

For many years OSHA has put into effect many regulations that have been a burden not only to the agricultural industry, but to other industries related to agriculture. But as I look and as I have visited with various elevator operators over the State, and I come up with some figures that state that it will cost an elevator somewhere in the neighborhood of $90,000 to $100,000 for implementation of these particular regulations to be able to conform with them. Put a little cowboy arithmetic to that and multiply that

$100,000 times approximately 400 elevators in the State, and that comes up to a figure of about $40 million that is going to have to come out of the State of Oklahoma.

Many of the witnesses before me have stated that this cannot be passed on to the consumer, and it seems as though we, as farmers, always get the raw end of the deal. It will be backed up against us.

How is this going to affect just an ordinary farmer? Well, let's assume for just a couple of minutes that the increased margin is a nickel per bushel that the elevator is going to have to charge. Let's just say that the average wheat farmer has 500 acres. You multiply that times 36 bushels per acre, average yield last year in Oklahoma. These figures come up to somewhere between $900 and $1,000 that it is going to cost every wheat farmer in the State of Oklahoma.

And right now with the economic conditions that we, as farmers, are facing, we cannot stand another $1,000 out of our paychecks. Most of us are not even making that much—or a lot of farmers are not even making $1,000 per year. So this would certainly hasten the demise of many of our smaller family farmers, as well as it would hurt some of the larger farmers.

The overall effect of these regulations, it is going to put a lot of our farmers farther in debt. Also, it is going to put a lot of our country elevators out of business, which are essential to the family farmer. If these elevators go out, he is going to have to haul the grain 50, 60, maybe 100 miles in some cases to be able to get to an elevator that can afford to comply with all these rules and regulations.

Whenever the harvest is going on, it is fast and furious, and we just don't have the time to take out to haul grain great distances. So I think the regulations, and I have read the regulations, are just a lot more of the redtape that someone is sitting behind the desk, trying to make up, make a job. And I think the safety issues have been addressed by our elevators here in Oklahoma.

The excellent record by those that have testified before me, and it states that very few, only one minor incident that was mentioned here this morning. So I think the industry, the grain elevator operators, are taking care of the problem themselves and we just don't need someone else trying to tell them how to do it.

Senator, I just appreciate very much your interest and concern on this issue that the hearing is concerned about today.

[The prepared statement of Mr. Jarrell follows:]

STATEMENT OF

JIMMIE L. JARRELL

ON BEHALF OF

OKLAHOMA STATE UNION OF THE FARMERS EDUCATIONAL

AND CO-OPERATIVE UNION OF AMERICA

BEFORE

SENATOR DON NICKLES, CHAIRMAN SUBCOMMITTEE ON LABOR

PRESENTED AT THE

LABOR SUBCOMMITTEE OVERSIGHT HEARING

YUKON, OKLAHOMA, JULY 13, 1984

Mr. Chairman:

My name is Jimmie L. Jarrell, president of the Oklahoma Farmers Union, a general farm organization in Oklahoma.

I appreciate the opportunity to make comments concerning the proposed safety standard regulations for grain handling facilities by the Occupational Safety and Health Administration.

I have read the proposed rules by OSHA and my first thought is the additional red tape and unnecessary regulations to be imposed.

I believe our grain elevator operators are concerned with a safe working place for their employees and I also believe that safe working conditions do exist in our elevators in Oklahoma.

As I read through the regulations, I found an enormous

amount of additional equipment that must be installed in elevators. I have inquired with several elevators and others and I am told that the cost for a country elevator to comply could be as high as $90,000 to $100,000 per elevator.

Senator, a lot of our elevators don't even gross $100,000 per year. So, what I see in effect could happen would be that a lot of our country elevators, which are used less than two months out of the year, would be forced to shut their doors.

My concern then would be what would happen to farmers should this occur. First of all it would cause farmers to have to haul their grain greater distances, in some cases up to 50 miles. This is an extra expense farmers just cannot afford in their present financial condition.

Even if the elevator could possibly afford to install the machinery, it would certainly add additional cost which cannot be passed onto the consumer but would be backed up and taken out of what the farmer receives for his bushel of wheat and we just can't stand any lower prices for wheat. Wheat is a very important industry in the State of Oklahoma. Last year we produced 180 million bushels of wheat, of which 80% is exported.

There are approximately 400 elevators in Oklahoma, which would mean that the cost could be as high as a ~~half~~ 40 million dollars for the cost of installing equipment by OSHA's proposed rules and regulations.

Senator Nickles, I appreciate your great concern for our farmers here in Oklahoma.

Senator NICKLES. Thank you very much, Mr. Jarrell. Mr. Voth, you may begin.

STATEMENT OF RON VOTH, VICE PRESIDENT, OKLAHOMA WHEAT GROWERS ASSOCIATION

Mr. VOTH. Senator Nickles, my name is Ron Voth and I am a wheat producer, vice president of Oklahoma Wheat Growers Association, and a director on the National Association of Wheat Growers Board.

Oklahoma and the National Wheat Growers represent wheat farmers on any issue that may affect their profitability and the stability of wheat producers and industry. These wheat producers are the most important link in this industry which we are responsible to represent.

Farmers are fully aware of the great risks associated with the grain industry. Safety and health are always on our minds as we must always work in some degree of danger, whether it be dust, equipment, or chemicals. Because of the nature of our business, we are also concerned about the safety of the grain and feed-handling industry.

Safety is something we feel is a long-term education that will never solve all the problems, but continued research, education, and training will continue to produce the reduction in incidences of explosions and accidents.

At this point, as a wheat producer, we have mixed—good and bad—feelings about OSHA. At one time a few years ago, farmers were going to be required to provide port-a-potties for employees working in the fields. Disregarding the cost and the practicality and feasibility, this proposal was completely out of reason and unacceptable. Are we again reacting or acting to solve problems?

Farmers, grain elevators, and feed manufacturers know who ultimately pays the cost of these proposals. Farmers do. We have no mechanism to pass on our costs. Grain elevators are important to us as producers. They handle, store, and market our product.

Both wheat producers and grain buyers are both facing the lowest returns on investments since the depression. The small country elevator I haul my wheat to handles about 1.1 million bushels per year for 450 active customers and employs 3 people year around except 2 to 3 weeks at harvest. Our cooperative is one of the strongest financially in the State. But these proposals as presented in the Federal Register would initially cost us—our figures, not OSHA's.

And I am going to point out, there was one figure that was left out here. I will add it on at the end here that will make the total correct.

Bin entry	$8,425
Grates	24,750
Inside elevator legs	22,654
Filter collector monitors	460
Emergency escape	35,955
Housekeeping	16,402
Pneumatic equipment	108,000
Other equipment	418
Total	217,064

Our experience with monitoring devices is that they are unreliable and unpredictable. Also, we move wheat only two to four times a year, either in-house or load out with two employees. Housekeeping is important and is accomplished by these employees on a regular schedule.

No scientific research has positively shown what is the safe level of dust except zero percent. This would be technologically impossible. These small country elevators should definitely be exempted from these standards.

Our country elevators are basically warehouses of grain. Should the cost of storing and selling our product continue to increase as these proposals would require, we as producers would have to look to other alternatives.

Farm storage is risky and requires good management, but as producers, most would rather use our commercial warehouses. This would eventually force these small country elevators out of business.

In general, as producers, we feel the proposed OSHA standards regarding housekeeping, bucket elevators, grates, emergency escapes, and bin entry are based on insufficient and unproven technical data, won't be cost effective, and will be extremely costly to an already ailing industry.

In closing, we as producers pay the costs, whether proposals are good or bad. We feel OSHA's proposals are unneeded and too costly. This is not to say that more efforts in research and education are needed. This risky industry has and always will be aggressively looking for safer methods of handling grain.

Safety records of the grain handling industry of the last few years bare this out as incidents of explosions are down drastically. Therefore, as wheat producers and members of the National and Oklahoma Wheat Growers Association, we urge that the only standards that are changed be those recommended by the grain and feed associations who know the problems and are desperately looking for practical solutions.

We all know safety is of greatest importance, but the bottom line is cost versus returns. In our estimation, costs would win hands down with OSHA's given standards. Respectfully submitted, Ron Voth. Thank you.

Senator NICKLES. Thank you very much, Mr. Voth. Mr. Jarrell, you mentioned the cost to the average wheat farmer is something like $1,000?

Mr. JARRELL. Very well could be.

Senator NICKLES. You got that, if I remember, by saying it could cost something like $100,000 per elevator, 400 elevators, and dividing that by, what?

Mr. JARRELL. Well, it goes back to a margin cost, as I visited with some of the elevator operators. The margin costs increased 5 cents per bushel. You are right in your calculations. And then I just estimated, and I may be off on my figures that the average wheat farmer, 500 acres—and it may be more—and times the average yield in Oklahoma, 36 bushels per last year. Those figures compute to around $900 and very well could be higher than that $900.

Senator NICKLES. It would be a couple dollars per bushel, or a couple dollars per acre and 500—that is where you are getting your $1,000 or more.

And it is your opinion that the wheat farmers themselves will ultimately bear the brunt of the expense?

Mr. VOTH. I think there is no question about it.

Senator NICKLES. We have heard some people say that the grain elevators would bear much of the expense and, I think initially they would. I think you both made the statement that particularly the small country elevators could not do it. They will close and that would mean the farmers will have to take their grain that much further to the nearest elevator.

Mr. JARRELL. That is correct, and also you have to take into consideration, oh, I don't know what percent, but a great many of these country elevators and co-op elevators are owned by the farmers, so it is backed up to them, regardless.

Senator NICKLES. If the elevator couldn't afford the changes, which many testified that they couldn't, they would close and the farmer would have to haul his wheat or grain that much further. The farmer would have to pay all out-of-pocket costs of which he will not receive anything for anyway. Is that correct?

Mr. VOTH. I would agree with that.

Senator NICKLES. Take, for example, the elevator that you go to, Mr. Voth. How far is that from your farm?

Mr. VOTH. Oh, it is an average of 4 miles.

Senator NICKLES. Four miles. But which elevator?

Mr. VOTH. Moretta Co-op.

Senator NICKLES. Moretta? Of course, you are in the middle of wheat country there, but if that one was shut down, you could go to——

Mr. VOTH. Oh, we would have elevators within another 10 miles, where we are at.

Senator NICKLES. There are other areas in the State that if you lost your country elevator, you may be looking at some distance before you would be able to find another; particularly if you had a whole domino experience where a lot of these smaller elevators would have to shut down because of these regulations.

Mr. JARRELL. In my portion of the State, which is south-central, wheat is not a primary crop. At the present time I have to haul wheat 20 miles, just to get to the elevator, and then I suppose the largest facility, next closest one would be at least 40 miles. It would be the Shawnee, or have to go as far as Chickoshea.

Senator NICKLES. It has been stated that the most primary ignition sources for combustion are in the bucket legs. Are there provisions other than those in the proposed regulations that would serve to control explosions, that you are aware of?

Mr. VOTH. Well, just in our experience at our elevator, I was visiting with our manager. We definitely feel that plastic buckets in the elevator would be an advantage in possibly reducing the danger of dust explosions in the legs. We have them both ways. But whenever they have to replace buckets, we are putting—replacing them with plastic to hopefully control any combustion in there.

Senator NICKLES. Mr. Jarrell, we appreciate your testimony before the panel. Thank you.

Mr. JARRELL. Thank you, sir.

Mr. VOTH. Thank you.

Senator NICKLES. Our next panelists, again representing farmers in the State, are Lyman Knapp, State coordinator for the American Agriculture Movement, and Jerome Smith who is a member of the Oklahoma Farm Bureau.

STATEMENT OF LYMAN KNAPP, STATE COORDINATOR, AMERICAN AGRICULTURE MOVEMENT

Mr. KNAPP. I am Lyman Knapp, as you said, State coordinator of the American Agriculture Movement. I belong to several other farm organizations. This is not my only membership in an agricultural group at all. I have been in agriculture for 69 years plus. I have lived nowhere else but on the farm, so therefore, then, I classify as a farmer to that extent.

Well, thank you, Senator, for this opportunity to appear before you and your committee on Labor and Human Resources relative to 29 CFR, parts 1910 and 1917 of the Federal Register. These are OSHA proposed regulations for grain handling facilities and will reflect a considerable expense to the grain handler.

The figure of 122.5 million per year for 10 years is méntioned in the Register. This seems to the average producer a quite significant expense. Furthermore, the producer is in no position to absorb this added expense and it will surely settle on them. Also, I am of the opinion the grain handlers cannot absorb this expense, either.

I do not intend to portray myself as an authority on grain handling, but I can discuss the current agricultural crisis. In the case of wheat, the present price is the lowest relative or parity price ever recorded.

The cost of agricultural inputs continues to climb. The gap between prices received and prices paid has enlarged the last years. I recently came across the attached sheet displaying cost and profit for wheat production prepared by Oklahoma State University.

Notice the 500-acre unit, 35-bushel-per-acre production and $3.90 per bushel sale price. Remember, $3.90 per bushel sale price today is a dream. Anyhow, under these conditions, the producer invested or risked $68,000 for a profit of $221.24 for the year, or $.01 per bushel.

Now take particular notice of item 8, labor. Nothing paid for labor. Why, I ask, should not a farmer be paid for his labor? Who else works for free? And the net agricultural income will not pay the interest on the farm debt. Why not ask the reason? The reason is, the answer to that question is, income or sales will not cover costs. It is as simple as that.

Still, there are those who say we must reduce commodity prices as they are too high; priced ourselves out of the market. By and large, these people are in high places in economics and Government.

For instance, William G. Lesher, Assistant Secretary of Agriculture, USDA, recently spoke at a conference on alternative agricultural and food policies and the 1985 farm bill at Berkeley, CA.

The conference was primarily for agricultural economists. At this conference Lesher cried, "Farm policies that move agriculture

more toward market orientation,"—in other words, lower prices yet.

I notice where the FMHA in 1982 has tripled its inventory of property. There were 43 bank failures last year—and you say lower prices?

Let me make this comment: You determine there is a segment of the economy you want to change its structure, for any reason. Then remove from that segment, or never allow, any real input from the segment into the pricing of its product and change will come about. You can even remove the very sophisticated operators. Here I speak of the boards of trade and the associated method of fixing agricultural prices.

Agriculture is now in these conditions, and, maybe, the grain handlers. Will the change be for the better or the worse? I could elaborate on that, too.

This is a very brief analysis of the producer's plight today. Much, much more could be said. However, I hope it is enough to convince you agriculture cannot be placed in a position of higher costs and I surmise the grain handlers will agree.

"As Agriculture Goes, So Goes the Nation." I am not copying Gene Whitley on that remark, either. I want you to know I wrote that down before he got to you this morning on that. Let not anyone conclude that I favor fires and dust explosions in elevators.

Let us all conclude that all operators of grain facilities will provide as safe a facility as possible with or without 29 CFR, parts 1910 and 1917. And as others have said here today, dust explosions are minimal. They have reduced significantly in the last few years to the extent that we just hardly have had one recently.

However, they are a possibibility. Let me add just a little. That is not on your printed up there. Do you suppose by any chance, since we do have agriculture in this predicament where we have the highest foreclosure rates since back in the thirties.

We have the lowest relative costs ever recorded. Do you suppose, and I would ask you, maybe, if you so choose, carrying this question on back to OSHA, could they figure out a way to add that additional cost of which we speak here to the public cash price of grain on the boards of trade? Now this way it would take some of the pressure off us producers and grain handlers, too.

I want to mention something else to you, Senator, that hasn't come up here and it is in the OSHA regulations in the Federal Register, and these pages are not numbered to my knowledge. However, it is in connection with the small elevator.

It is necessary to consider that—they talk about the various facilities that are covered by this and then they come down to the end of this paragraph here and it says this, "The small entities (mills and processing plants) are defined as those having 10 or fewer employees."

Now I am glad to hear the discussion as it came through here today by the various representatives of the industry, because I think that in the event this was to become a statute or regulation that was enforceable with some similar emphasis of the statute, that you could very well expect that number 10 to be reduced considerably. So I think you are very possibly correct, these other

people who have testified, in saying this will apply to me when we have these small numbers, you know, under 10.

I can see a very direct possibility of that number being lowered and I think we need to take cognizance of that, because if you go into a hearing with a lot of this testimony, they are liable to rule this right out and say, well, look, these people are not influenced by this. You see what I mean?

Senator NICKLES. Yes. I appreciate your comments.

Mr. KNAPP. Yes.

[The prepared statement of Mr. Knapp follows:]

Testimony of Lyman Knapp, Oklahoma State Co-ordinator of American Agriculture Movement Presented July 13, 1984 at El Reno, Oklahoma tothe U. S. Senate Committee on Labor and Human Resources

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AS AGRICULTURE GOES, SO GOES THE NATION.

Let not anyone conclude that I favor fires and dust explosions in elevators. Let us all conclude that all operators of grain facilities will provide as safe a facility as possible with or without 29 C.F.R. Parts 1910 and 1917.

Yours Truly

Lyman Knapp, State Co-ordinator OklaAAM

Screen 2.0 OSU Screenbudget Program

WHEAT

11.12.15 35 /A. 3.9 $$/BU. Acres 500

	Quantity	Price	$/Acre	$/BU.	Total $
1. Seed	1.00	5.00	5.00	0.14	2,500.00
2. Nitrogen	85.00	0.17	14.79	0.42	7,395.00
3. Phosphor	25.00	0.24	6.00	0.17	3,000.00
4. Potash	0.00	0.00	0.00	0.00	0.00
5. Insectic	0.50	8.00	4.00	0.11	2,000.00
6. Herbicid	0.75	7.45	5.59	0.16	2,793.75
7. Fuel & O	8.00	1.19	9.52	0.27	4,760.00
8. Labor	0.00	0.00	0.00.	0.00	0.00
9. Rent	1.00	50.00	50.00	1.43	25,000.00
10. Tot.Var.	0.00	0.00	94.90	2.71	47,448.80
11. Interest	48.00	0.17	8.16	0.23	4,080.00
12. Mach.Dep	1.00	33.00	33.00	0.94	16,500.00
13. Tot.Cost	0.00	0.00	136.06	3.89	68,028.80
14. Income	35.00	3.90	136.50	3.90	68,250.00
15. Return	0.00	0.00	0.44	0.01	221.24

SENSITIVITY TABLE FOR WHEAT

MonJun281982179 6010.55.18

Price	Yield 28.00	31.50	35.00	38.50	42.00
3.12	-48.70	-37.78	-26.86	-15.94	-5.02
3.51	-37.78	-25.49	-13.21	-0.92	11.36
3.90	-26.86	-13.21	0.44	14.09	27.74
4.29	-15.94	-0.92	14.09	29.11	44.12
4.68	-5.02	11.36	27.74	44.12	60.50

RETURNS AT VARIOUS YIELDS AND PRICES

Senator NICKLES. Mr. Smith, you may begin.

STATEMENT OF JEROME SMITH, MEMBER, OKLAHOMA FARM BUREAU

Mr. SMITH. Senator Nickles. My name is Jerome Smith and I have been requested to present this statement today on behalf of the Oklahoma Farm Bureau because of my 10 years experience as a member of the board of directors of the Banner Co-Op Elevator Association just west of here.

I have been a member of the Oklahoma Farm Bureau all of my adult life. Earlier I was active in the youth organization. I produce wheat, alfalfa, oats, cattle, and horses on an 800-acre operation.

We commend you, Senator Nickles, for conducting this hearing in the State to give more of us a chance to relate our feelings about the subject.

I cannot let this opportunity pass to state that somehow the Nation survived 200 years without the Occupational Safety and Health Administration The idea that only the Federal Government is smart enough to deal with safety in the workplace, nearly any workplace, is false. Congress started out to deal with mine safety and instead created an agency that covers the Nation's industry like a shroud.

Farm Bureau policy, for what it is worth, calls for a repeal of the laws that created OSHA. Once an agency is created, there is a natural tendency to do something, and OSHA is doing something.

But we are here to deal with the proposed new regulations for elevator safety with regard to grain dust and its explosive nature. Nowhere in the proposed regulations do I find a penalty section, so it is presumed that elsewhere in existing regulations there are provisions for fines for violators. The greatest penalty for poor safety, however, is not a Federal fine. The greatest penalty has always been and always will be, injury to employees or loss of life, the destruction of property and the loss of time to an elevator.

No insurance policy can absolutely cover such losses. It is obviously in the best interest of the elevators, whether cooperative or otherwise, to have the safest possible conditions and to prevent such losses from occurring. And I think you have heard that statement by almost all represented here, that the individual effort has reached much farther back than what the laws have required.

OSHA knows, of course, that it is impossible to handle large amounts of grain over long periods of time without generating dust. There is no way that an elevator can be made absolutely explosion proof.

Even the most sophisticated and expensive monitoring equipment is subject to failure. The human element is always subject to errors of judgment and carelessness.

We are doing the best we can to prevent those injuries and accidents with regular safety training and inspections. You have heard today from several persons the details of safety training that has been going on for many years even before OSHA was started.

A case can be built that the explosive danger in an elevator is greater now than before the Government prohibited the venting of

grain dust in an effort to have cleaner air. We have temporarily cleaner air, but more explosive elevators.

I suggest it would be appropriate to rethink those regulations. Pollution control is a trade-off; there is no such thing as zero pollution in a productive society.

The proposed new regulations contain a great deal of nuisance factors, the costs of which are difficult to estimate. For example, if an elevator elects one option from paragraph (i)(2), then the management must assign someone with extra good eyesight to measure the dust and make sure the accumulations do not exceed an average of one-eighth inch, and hope he is measuring the same 200 square feet that might be selected by an OSHA inspector. We don't need OSHA to tell us that one-eighth of an inch of grain dust is dangerous.

Or if he elects option two, he must make sure that cleaning is done each shift, and that every such cleaning is logged in to OSHA's satisfaction. In our country elevator, only during 3 or 4 weeks of the year do we have any "shifts."

Option three would require new machines and the expense would be prohibitive for small operations. And I might there add that in many of the country elevators, there are multiple units, and we have elevators that have 2 million or more bushels that might have a dozen buildings, elevators scattered around in several locations, which adds greatly to the cost of this requirement.

The entire proposal would require an elevator-by-elevator approval process that will doubtless take many sheets of forms and many hours of staff and Federal employees' time to complete.

The current regulations are more than adequate.

Finally, we must deal with the cost of complying with these proposed new rules. Whatever the cost, it will be borne by the farmers who produce the grain.

The cost will be reflected in lower prices to farmers or lower dividends from their co-ops or both. In the case of the co-ops, who are owned by the farmers, it is both. Increased costs in staff time, machinery and other things necessary to complete--comply—will not make the grain any better.

It will, however, make it more expensive to handle. It would be dead weight, nonproductive cost. Times are tough in the grain business for producers and for small elevators. These regulations could add an unnecessary burden to an already faltering grain economy.

Those elevators which have lost their rail service are especially in poor competitive position due to the higher cost of transportation.

We view these new proposals as overkill and urge that they do not be adopted. At the very least, we urge that the regulations not be applied to the country elevators. We suggest that it would be more proper to classify elevators by function, rather than by the arbitrary 1 million bushel capacity.

I am talking about storage elevators as compared to export terminal type elevators. Those elevators which are primarily storage facilities do not pose as much daily danger of explosion as terminals and processing plants.

It would be preferable for OSHA to concentrate on research and to monitor safety training programs of these country storage facilities.

We appreciate this opportunity to make our wishes known.

Senator NICKLES. Thank you very much, Mr. Smith. I have a question for either of you. Do you think the fact that on-farm storage is exempt that you would see an increase from farmers with on-farm storage and move away from the country elevators, if there is a difference, say, of 6 cents?

Mr. SMITH. I think definitely the larger farmers would be compelled to go to their own storage in view of this, and this has been our trend for several years. The larger operations are becoming more self-sufficient, providing more of their own functions, their own wholesalers.

We had a recent statistic in one of our meetings that only those farms of over 300,000 to 500,000 gross were actually making profit.

Senator NICKLES. Would you please repeat that last statement.

Mr. SMITH. The only farms that were making a profit from agriculture alone were those grossing between $300,000 and $500,000.

Senator NICKLES. What about over that?

Mr. SMITH. I presume that they would be doing better.

Senator NICKLES. They had to be in that range?

Mr. SMITH. Yes. Below that range, they were marginal to losing money.

Senator NICKLES. But if they had a gross income of less than $300,000, your study or survey showed that they would come out in the red.

Mr. SMITH. The input into that was that not were they producing that much cheaper as far as their actual cost of input, but they were providing more—they were getting wholesale options because of their size and they were their own wholesalers and doing their buying cheaper, this type of saving.

Senator NICKLES. Did you take debt into account? Some of the different farmers I've been meeting with have the land and equipment paid for. They might be able to stay ahead; but those who are in debt heavily are the ones taking a bath. Do you have a comment?

Mr. KNAPP. Yes, Senator. To answer your first question there, there is no doubt farm storage—on-farm storage is increasing and rather rapidly. I can't give you the figures just off the top of my head, but I have seen them and for a grain handler, whether he be a co-op or an independent or whatever, it should be and is, as I gather now, a definite concern to those people. There is no doubt, furthermore, that, as Mr. Young has said here—Smith? I better get that right—that that trend to become your own wholesaler or merchandiser is certainly on the increase. So there is some ramifications to this.

As to the debt position, there is no doubt about it. You know, I made the statement there that the net income in agriculture today won't pay the interest on the national agricultural debt. And these are figures that can be easily obtained. In fact, Senator Boren made the remark something like a year ago to that extent, and it boils down to somewhere in the neighborhood of 10 percent is about where that breaking point is.

In other words, you have got a $200 billion national debt and you had somewhere around an $18 or $20 billion income, so 10 percent of $200 billion, it all goes to pay interest, you see? And there is going to be, and something has got to give.

We have sales coming up in our neighborhood now, and as you know, Kay County, we kind of think we are a little more prosperous than some other counties, and things are happening there that shouldn't and in this connection, it is one of those things. You are just not going to be able to put this on the back of the farmer and he survive. And it gets you around to asking several other questions about that, if you wanted to, in that aspect, however it don't pertain to the grain elevators and this regulation.

But I wished I would have saved the comic book that—maybe I shouldn't mention this, either, that OSHA put out here early on barnyard safety. Did you see that thing? It was interesting, wasn't it? I couldn't say it was anything more than just humorous, but there certainly wasn't anything factual about it, other than if you did step in a puddle of some sort, it could be slippery. I agree with them on that. But this kind of reminds me of that a little bit, you know. For instance, watch the bull. He might have a different temperament than you think he has, or he is disagreeable today, or something else. Ah, phooey.

Senator NICKLES. Gentlemen, we appreciate your testimony before the committee.

We have at least one other panelist, Haskel Cudd with Stillwater Milling.

Mr. Cudd, we welcome you from Stillwater. We appreciate your interest as we haven't had anyone from the milling industry to share their comments.

STATEMENT OF HASKEL CUDD, STILLWATER MILLING CO.

Mr. CUDD. Don, we certainly appreciate you coming back to Oklahoma and hearing some of our thoughts. I represent the Stillwater Milling Co. of Stillwater, OK. I happen to be president and chief executive officer.

The Stillwater Milling Co. operates a modern feed mill and grain elevator and are manufacturers of poultry, livestock feeds which are used in the production of meat, milk, and eggs.

OSHA is proposing a new grain handling regulation which if implemented as proposed, would be the most expensive Government regulation in the history of the livestock and poultry feed manufacturing industry. We can see only added cost in the production of meat, milk, and eggs to the consumer and if these regulations as proposed by OSHA are enacted, it will be one step closer to destroying many small feed mills and businesses in our country.

We need these mills, as they employ a large number of people and render a real service to their community. An economic study, Don, which I have put on your desk, the cost was held by the American Feed Manufacturers Association that was done by a consultant firm out of Decatur, GA, and at a cost of $24,000.

Now it is my understanding that OSHA made a couple of studies and one cost $240,000 and the other $150,000. That compares with Government and the free enterprise system.

Senator NICKLES. Good point.

Mr. CUDD. And that economic impact study conducted by the respected engineering consulting firm found that the cost to the average large feed mill who produces more than 50 tons per year would be $115,000. The cost to the average medium-sized feed mill would be—who produces 15,000 to 49,000 tons of feed a year (sic) would be $65,000. And the cost to the average small feed mill out throughout our country who produces less than 15,000 tons would be $41,000.

There are about 900 large feed mills in the United States, about 2,000 medium-sized feed mills and about 6,100 feed mills with less—of the small size. And the cost to industry, listen to this: $490,690,000. That is what it would cost to bring the feed mills across this United States up to where it would meet OSHA's requirements.

That does not take into consideration what the annual costs would be. The primary object of the regulation is to reduce death, injuries from fires, explosions and grain handling facilities. That regulation is not needed for feed mills.

The U.S. feed industry has an excellent safety record. There are more lives lost by drowning in the Potomac River in the Washington, DC, area alone than are lost in all of the 9,000 feed mills across this United States. [Applause.]

Since I have been with this company 50 years, we have not had a single casualty. The American Feed Manufacturers Association is a national trade association, representing the feed manufacturers of more than 70 percent of the primary manufacturers of livestock and poultry feed sold in the United States. American Feed Manufacturing members during the last 5 years have had no deaths, only seven injuries as a result of feed mill explosions; have had two deaths and only one injury as a result of fire. We have had only one death due to bin entry, which is included in the proposed OSHA report.

This is an exceptional safety record and certainly does not justify OSHA imposing the most expensive Government regulation in the history of the feed manufacturing industry. Therefore, on behalf of the livestock and poultry feed manufacturing industry of Oklahoma and the United States, we of Stillwater Milling Co. are requesting that feed mills be excluded from the proposed regulations.

I would like to add a few remarks. One is that if they keep on imposing these costs upon the American farmer, upon American industry, we are going to get our cost of production above the cost of world market and we are going to be flooded with imports.

One of our biggest problems today is competition from the outside. In the past year a large load of oats moved into the Port of Catoosa from one of the Scandinavian countries. That is in direct competition with our American grain people and if this continues, we will get our costs so high by such regulations and other costs, our costs will be so far above world market, so there is no way in the world that we can compete.

Thank you very much.

[Information supplied for the record follows:]

AN ECONOMIC IMPACT STUDY

of

PROPOSED OSHA GRAIN HANDLING FACILITIES STANDARD

(TITLE 29 CFR PART 1910.272 GRAIN HANDLING FACILITIES)

on

THE FEED MANUFACTURING INDUSTRY

Prepared for:

AMERICAN FEED MANUFACTURERS ASSOCIATION, INC.

Arlington, Virginia

Prepared by:

THE T. E. STIVERS ORGANIZATION, INC.

Consultants & Engineers

Decatur, Georgia

Project No. 6882

JUNE, 1984

AN ECONOMIC IMPACT
OF
PROPOSED OSHA GRAIN HANDLING FACILITIES STANDARD
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- Federal Register, Friday, January 6, 1984, 49 Fed. Reg. 996 through 1014 29 CFR Parts 1910 and 1917 Grain Handling Facilities; Safety Hazards; Proposed Rule Making

- OSHA Emergency Action Plan, Safety and Health Standards (29CFR1910) Part 1910.38(a)

- Initial Checklist for Mill Visits (5 pages, March 15, 1984 prepared by Stivers)

- Proposed OSHA Grain Handling Standard Review (6 page outline related to administrative and training, March, 1984 prepared by Stivers)

- Excerpt from engineering directory (Stivers' qualifications)

1. SUMMARY

Background

On January 6, 1984, details of OSHA's proposed Grain Handling Facilities standard, part 1910.272 of the Code of Federal Regulations, were published in the Federal Register.

The proposed standard includes preliminary regulatory impact information for the grain and related industries as a whole.

To separate and evaluate the potential economic impact of the proposed standard on the feed manufacturing industry, the American Feed Manufacturers Association retained The T. E. Stivers Organization to provide an economic impact study. The Stivers Organization is an independent professional engineering firm specializing in a broad range of services for the feed, grain and related industries.

Stipulated objectives of the study were to,

- Visit and observe 20 feed mills of various sizes, age, design and geographic location,
- Evaluate the proposed OSHA Grain Handling Standard for the purposes of identifying the most cost effective, practical method of compliance, and
- Evaluate the economic impact of the proposed standard to the 20 mill sample, and calculate the impact to the total feed mill industry.

Eleven sections of the proposed standard were observed to specifically apply to feed mills. Three sections apply to "grain elevators". However, based upon the definition of grain elevator given in the standard, it is believed these three sections (grain dryers, inside bucket elevators, partially-inside bucket elevators) would probably be construed to apply to the raw bulk grain handling portion of feed mills as well.

Impact Costs of Mills Observed

After the mill visits, data was evaluated and expected changes and costs to meet the standard were determined. The cost for the 20 mill sample to meet the proposed standard is projected in the following table.

	Mill	Year Built	Tons/Year	Cost Impact ($)
L	A	1979	200,000	20,787
A	B	1963/1970	60,000	98,432
R	C	1967	60,000	57,310
G	D	1948	75,000	82,947
E	E	1920/1940	225,000	315,597
	Avg.			115,000(1)
M	F	1970	25,000	54,273
E	G	1960	30,000	42,879
D	H	1949	30,000	69,094
I	I	1950	25,000	49,111
U	J	1930/1980	30,000	95,113
M	K	1948	19,000	84,349
	Avg.			65,800(1)
	L	1970	14,000	25,941
	M	1969	14,000	43,061
S	N	1950/1977	9,000	53,111
M	O	1965	9,000	48,684
A	P	1950	15,000	33,512
L	Q	1900/1950	14,000	40,846
L	R	1950	10,000	43,497
	S	1948	10,000	39,946
	T	1894/1951	5,000	48,937
	Avg.			41,900(1)
	Weighted Average			67,300(1)

(1) Rounded to nearest hundred.

Impact to Industry

Based on USDA, FDA, and ASCS data, it is believed the U.S. has a total of at least 9000 feed mills.

Extending the average cost impact of the 20 mill sample, for 3 sizes, to the total 9000 mill industry, the cost impact would be as follows:

	No. Mills	Mill[1] Impact Cost	Industry Impact
Large Mills (Over 50,000 tons/year)	900	$115,000	$103,500,000
Medium Mills (15,000 to 49,999 tons/year)	2,000	65,800	131,600,000
Small Mills (Up to 14,999 tons/year)	6,100	41,900	255,590,000
Total	9,000		$490,690,000

(1) Basis 20 mills observed.

Therefore, the impact of the proposed standard on the feed manufacturing industry would be $490,690,000.

The major impact of the proposed standard results from the following requirements:

	Industry Impact[1]
Housekeeping - 1910.272(i)	$ 162,000,000
Preventive Maintenance - 1910.272(l)	113,000,000
Emergency Action Plan - 1910.272(d)	92,000,000
Inside Bucket Elevators - 1910.272(p)	38,000,000
Training - 1910.272(e)	21,000,000
	$ 416,000,000

(1)Rounded to nearest million.

The following table tabulates the cost impact of the 14 sections of the proposed standard for the 20 mills visited:

	Average Mill Impact Cost			
	Large Mills	Medium Mills	Small Mills	All Mills
Emergency Action Plan	15,061	11,149	7,498	10,484
Training	9,869	2,507	1,100	3,714
Permit System	157	160	249	199
Entry Into Bins, Silos & Tanks	2,100	2,108	2,772	2,405
Contractors	424	296	178	275
Housekeeping (Once/Shift)	43,618	25,800	11,613	23,870
Grate Openings	1,500	1,400	1,733	1,575
Filter Collectors	532	110	0	166
Preventive Maintenance	26,865	14,984	9,728	15,589
Grain Stream Precessing Equipment	840	533	356	530
Emergency Escape	1,160	1,183	1,467	1,305
Bulk Raw Grain Dryers	616	173	909	615
Inside Bucket Elevators	11,292	5,067	2,956	5,673
Partially-Inside Bucket Elevators	980	333	1,389	970
	115,014	65,803	41,948	67,370

The housekeeping (basis once per shift cleaning) and preventive maintenance requirements necessitate additional personnel above present staff, and provision for this is included in the projected impact cost. Cost for initial training of employees is included in the impact cost. However, there would be on-going costs for at least annual training and retraining of employees, which is not included in this report.

Basis of Impact Costs

The impact costs presented herein are the expected first year, initial costs only. However, some of the major cost items, such as housekeeping, preventive maintenance, and training, would also necessitate recurring costs, which are not included herein.

The impact costs reported herein are based on the most cost effective, lowest initial cost. For example, the housekeeping section of the standard can either be met by installing pneumatic dust control, by cleaning when dust accumulations reach an action level, or by cleaning once per shift. Since the pneumatic dust control is far more costly initially, the once per shift cleaning alternative was chosen as the lowest cost alternative to compute the initial cost impact for purposes of this study.

In conclusion, the projected costs reported herein, along with the assumptions that were made, are believed to represent a reasonably conservative estimate of the initial impact of this proposed standard. In addition, there will obviously be future annual recurring and on-going costs, which rough estimates indicate could run in excess of $300,000,000 annually, based on today's cost.

Senator NICKLES. Thank you very much, Mr. Cudd. I think you make an outstanding point. Almost every agriculture forum I have been involved with, agrees that we have to export more. We just produce more than we can consume domestically and the balance of that market has to go for exports.

I think the point you make, will greatly increase costs for domestic production.

Mr. CUDD. Affects our exports and, Don, you have read in the past few months, our trade deficits have been building up to $10 and $12 million a month and it is just stuff like this that has created a real problem.

Senator NICKLES. Do you think that Argentina, Australia, Canada, and those other countries have this type of rule or regulations?

Mr. CUDD. No, sir. They do not. I have been there.

Senator NICKLES. We won't put the entire study into the attached record, but we will take some of the summary and include that in the record. Would it cost $490 million on the feed mills?

Mr. CUDD. Right.

Senator NICKLES. You mentioned it would cost something like——

Mr. CUDD. It would cost me $115,000.

Senator NICKLES. I was going to ask, were you in that larger category of feed mills?

Mr. CUDD. Yes, sir. It will cost us $115,000, plus the yearly cost of keeping it up to meet the requirements, and we haven't gone into that, but I doubt if we could get by less than $25,000 to $40,000 a year.

Senator NICKLES. Shawnee Milling Co. would also be in that larger category?

Mr. CUDD. Right. Shawnee Milling Co.; Evergreen Mills at Ada; W. P. Milling Co. at Muskogee; the two mills in Oklahoma City.

Don, in your hometown, the Donohugh Elevator is available and, basically, I was talking to the manager there and he said it is going to cost a tremendous sum of money to bring that elevator up to meet requirements. He is faced with spending a tremendous sum of money or put it on the market. And today with these—such regulations as we are faced with, it is going to bring a very cheap price. It is real sad that it has been—this kind of an order is being thrown at us and it is real costly.

Senator NICKLES. I appreciate you saying that. This is the exact reason why we had this hearing today. Many people who don't know about these problems need to know about them. Senator Boren has indicated his interest in this as well. If we can get enough people in Washington, DC, to ride herd on OSHA, maybe something can be done. Sometimes we have Government agencies who act very independently and start putting on rules and regulations without enough input in the real world.

Mr. CUDD. If they would just get out into the country and find how farmers are getting along, how grain people are getting along, grain elevators, feed mills, they would start changing their tune a little bit. We started tightening our belts several years ago and now there is not much left to tighten.

Senator NICKLES. My grandfather once told me it is better to tighten your belt than lose your pants, and I think we are in the process of doing that.

Mr. CUDD. Thank you very much, Don.

Senator NICKLES. Thank you very much for your statement. Do we have anyone else who would like to make a brief comment?

Mr. HUFF. Thank you, Senator.

Senator NICKLES. OK.

Mr. HUFF. Bert Huff, Enid, OK.

Senator NICKLES. You have to come up to the microphone so they can hear you.

STATEMENT OF BERT HUFF, ENID, OK

Mr. HUFF. Senator, I am Bert Huff of Enid, OK. For 40 years I have built grain storage facilities and sold grain elevator equipment. I want to put this business of one-eighth inch of depth of dust on the floor of grain elevators at rest for all time.

By "at rest," I want to point out that the depth of dust on a surface is absolutely immaterial. It doesn't matter whether it is a hundredth of an inch or a full inch or a foot. As long as that dust is at rest, it can't explode. And as Paul Jantz mentioned very briefly in his comments, you have to have a certain mixture of fine dust—not the rough stuff, chaff—but fine dust and heat and oxygen to make an explosive mixture.

To emphasize that, I want to tell you about a true thing that happened to me up in Kansas once. I was talking to a, "safety engineer," for the department of health and environment of the State of Kansas about safety regulations in grain elevators. We talked for about a half hour and I thought we had a good talk, and when I was ready to leave him, he said, "Wait a minute, Bert, I want to ask you a question." He said, "How deep does the grain dust have to get in an elevator before the elevator will blow up?" Obviously, it was so dumb that I think that man must be one of the guys that wrote these regulations. That is all I have to say, Senator.

Senator NICKLES. Thank you very much for your comments. Just for other individuals' information, it is my intention to meet personally with Barry White, who is the Director of Safety Standards for OSHA. My purpose for this meeting is so the agricultural community will have a hand and voice in the directions this final ruling will take; if there is to be a final ruling. This hearing has been very helpful to me, and I think for the committee as well. I appreciate the outstanding expertise that we have had from the agricultural community, the grain industry, from the producers, and the milling industry.

I think you have really given us some commonsense that has been lacking in these proposals in the past, and we will do the best we can.

If you sign in on the sheet that was in the back of the room, we will try and keep you notified of the changes. We have also provided a few copies of the proposal as two or three people asked for it when I came in. If we run out of the copies, they are printed in the Federal Register. Copies can also be obtained from our Washington

office. We will stay in touch with you as final regulations or the changes are proposed.

I would also like to introduce my staff members who have been working on this and will be able to help you.

One is Clinton Key in the back. He is out of our Oklahoma City office and deals with agricultural issues. Behind me is Les Brorsen who works in Washington, DC, and for the most part of the summer will be in Oklahoma. He is my agricultural legislative assistant and has also been working almost fulltime on these proposals.

Also from Washington, DC, is Charlene Abshire who works on our Labor Subcommittee that deals directly with OSHA. You have been very helpful in giving me an indication of how this would affect you in your industry. Please stay in touch with us if we can be of help to you in the future.

We will adjourn the meeting. The record will be open for 30 days for additional comments.

[Additional material supplied for the record follows:]

STATEMENT OF PATRICK R. TYSON
DEPUTY ASSISTANT SECRETARY OF LABOR
FOR OCCUPATIONAL SAFETY AND HEALTH
SUBMITTED TO THE
SUBCOMMITTEE ON LABOR
OF THE
SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES

July 13, 1984

Mr. Chairman and Members of the Subcommittee:

Thank you for allowing me to present testimony on the Standard for Grain Handling Facilities proposed by the Occupational Safety and Health Administration (OSHA), in a Notice of Proposed Rulemaking that appeared in the Federal Register of January 6, 1984. The purpose of the rulemaking is to decrease the number of fires and explosions in grain handling facilities as well as to control other known safety hazards in these workplaces.

History of the Rulemaking

National attention was focused on the hazards associated with grain handling facilities as a result of a series of devastating explosions that occurred in these facilities in late 1977 and early 1978. For instance, during December 1977 alone, 59 deaths and 49 injuries resulted from explosions. OSHA estimates that there may be as many as 2000 or more fires in grain handling facilities each year.

There are approximately 200,000 employees in 16,000 workplaces exposed to various hazards in this industry. The population at risk includes not only employees at grain handling facilities; it also involves firefighters, Federal grain inspectors, state and local government workers, farmers and bystanders. Representatives of all of these groups have suffered casualties as a result of fires and explosions at grain handling facilities.

OSHA estimated in its Federal Register Notice that, if fully implemented, the proposed standard could eliminate as many as 18 explosions and 1,617 fires annually. Based on a risk assessment performed for OSHA, these accidents currently result in an average of 17 deaths and 697 injuries each year. In addition, as many as 21 deaths and 70 injuries could be prevented by controlling grain handling hazards other then fires and explosions. Thus, the proposal could prevent a total of approximately 38 deaths and 767 injuries annually. Approximately $98.3 million in annual property damage and loss from business interruption would also be averted by the proposed standard.

OSHA has taken a number of steps that led to the development of this proposal. In January 1978 the agency issued a Grain Elevator Industry Hazard Alert which was distributed to over 10,000 grain handling facilities and other interested concerns. The purpose of the alert was to provide employers, employees and other parties available information on the safety hazards as well

as the health hazards associated with the storage and distribution of grain. In late 1978 OSHA initiated a contract with the National Academy of Sciences to study the causes and prevention of grain elevator fires and explosions. OSHA believed that this additional inquiry into fires and explosions in grain handling facilities was needed before the agency could determine how best to address the hazards.

On February 15, 1980, OSHA published in the Federal Register a request for comments and information on the safety and health hazards in grain handling facilities. More than 225 comments were received in response to the notice, and almost 2,000 pages of testimony were received at three public meetings held in April and May 1980. Several points were raised consistently throughout the comments and testimony, including the following:

1. OSHA should not develop a standard until the results of research projects are available (e.g., the National Academy of Sciences).
2. If OSHA determines that there is a need for a standard, it should be performance-oriented and cost-effective.
3. OSHA should emphasize consultation, education, and training.
4. If OSHA develops a standard, that standard should address the known hazards.

Information received as a result of the notice has been invaluable in assisting OSHA to focus on the factors which the agency believes to have the greatest potential for mitigating fires and explosions.

In conjunction with these information-gathering activities, OSHA increased inspections of grain handling facilities. Since there are currently no specific standards for these facilities, OSHA relied on the application of housekeeping requirements and other existing general industry standards. In some cases OSHA issued citations under the general duty clause (section 5(a)(1) of the Occupational Safety and Health Act of 1970) supported by various national consensus standards such as the National Fire Protection Association's Standard 61-B, "Prevention of Fires and Explosions in Grain Elevators and Facilities Handling Bulk Raw Grain". OSHA has experienced significant difficulty attempting to apply existing OSHA standards and the consensus standards. For example, many citations issued by OSHA were contested and ruled invalid by the Occupational Safety and Health Review Commission or the Federal Courts.

In recent years OSHA has received numerous communications regarding the inadequacy of its current standards for dealing with the hazards of grain handling and the need for a specific standard for grain handling. The agency felt that it was

important to provide a sound basis for developing such a rule. Thus, OSHA did not proceed with the proposal until it had reviewed all data and information submitted to the record and until the National Academy of Sciences' reports, issued in 1980, 1982 and 1983, had been reviewed.

Provisions of the Standard

The proposed standard for Grain Handling Facilities contains requirements for the control of safety hazards associated with grain handling facilities in general industry and maritime employment. OSHA has proposed that the scope of the proposal include grain handling facilities located inland or near water. The proposed standard would apply to grain elevators, dust pelletizing plants, feed mills, rice mills, floor mills and corn and soybean milling operations. It would apply to all grain elevators, including those which may be only a segment of a facility.

The agency is asking interested parties to comment on the applicability of each provision to various types of facilities and, in general, the appropriateness of covering many diverse types of operations with a single standard. OSHA is particularly interested in comment and data on the coverage of small facilities.

The proposed standard focuses on two primary factors associated with fires and explosions in grain handling workplaces: first, control of ignition sources, particularly those associated with inside legs and hot work, and second, control of combustible dust.

While recognizing the primacy of these two factors, OSHA, nonetheless, developed its proposal in the belief that no single provision, such as the proposed housekeeping provision, would eliminate the hazards associated with grain handling facilities. The agency proposed an integrated standard, in which implementation of all of the provisions would be necessary for the safety of employees in this industry.

With regard to methods and frequency of dust control, OSHA has proposed a performance-oriented provision. Although no level of dust accumulation can be considered completely safe, it is not feasible, and may be impossible, to remove all dust accumulations at all times. The proposal requires that dust accumulations be minimized through the use of an ongoing housekeeping program which utilizes the most efficient and feasible methods of dust removal. Realizing that there may be several types of housekeeping programs that will effect substantial reductions in the risks of fire and explosions, OSHA is proposing to allow employers to choose among three different methods of achieving the goal of reduced dust accumulation.

The first option would require immediate corrective action whenever dust accumulations reach a predetermined depth, termed the "action level." Under this option the standard would establish an action level not to exceed a 1/8 inch layer of dust when averaged over a 200 square foot floor area. If dust accumulations reach the established action level, designated methods must be initiated immediately to remove such accumulations to a safe location. If dust accumulations exceed the 1/8 inch level and efforts have not been initiated to remove the dust, an employer would be violating the standard.

The second dust control option would require employers to remove hazardous accumulations of dust not less often than once per shift when the facility is in operation. The employer's housekeeping program would have to specify procedures for cleaning and dust disposal as well as the type of equipment to be used. This option also contains requirements for employee training and equipment maintenance.

The final option would permit employers to use an engineering approach to dust control. It would require employers to install and maintain a pneumatic dust control system covering dust emission points so that there are no visible dust emissions coming from the stock handling system. A number of grain handling facilities have already installed such dust control systems.

A preliminary assessment of compliance costs associated with these housekeeping options indicates that they may have a greater economic impact on small grain elevator facilities than on larger firms. Accordingly, OSHA is proposing that these provisions become effective July 1, 1985, for all grain handling facilities except for the small elevator facilities. These facilities would be required to comply with one of the three dust control options by July 1, 1988.

Another housekeeping provision would allow the use of compressed air to blow dust from ledges, walls, and other areas only when all machinery representing an ignition source in the area is shut down and all other sources of ignition are removed. This precaution would mitigate potential hazards associated with any suspended dust concentrations resulting from "blow-down" procedures.

Grain or product spills would not be considered grain dust under this proposal. OSHA's intent is that the proposed requirements for an action level for fugitive grain dust accumulations should not apply to spills. An employer's housekeeping program however, would have to include procedures for removing such spills from the work area.

There are a number of other provisions in the proposal which are designed to help employers and employees reduce the dangers found in grain handling establishments. For instance OSHA has

proposed that each employer develop and implement an emergency action plan and that it be communicated orally or in writing to all employees. The plan must include an employee alarm system, evacuation procedures, methods of accounting for employees after evacuation, and instructions for employees on action to be taken during emergencies.

OSHA is also proposing to require employers to train each employee at least annually and when changes in job assignment will expose them to new hazards. The training must include information on recognition and prevention of safety hazards associated with the work tasks of employees. The training must also include, where applicable, safety practices established by the employer such as those dealing with housekeeping, preventive maintenance, smoking, other ignition sources and lock-out/tag-out procedures. Employers would also be required to assure that employees assigned special tasks, such as handling flammable or toxic substances, are properly trained to handle those tasks. There is widespread agreement that implementation of an effective training program is one of the most important steps that an employer can take to enhance safety in grain handling facilities.

Under the proposal, employers would develop and implement a permit system for "hot" work, such as welding, and for work requiring entry into bins, silos and tanks. The permit would be

the written authorization by the employer for employees to perform identified work operations subject to certain precautions.

To deal with the dangers of confined spaces in grain handling facilities, OSHA is proposing that certain precautions be taken before employees are allowed to enter bins, silos, and tanks. These precautions include: assuring that mechanical and electrical equipment which presents a danger to employees inside bins, silos or tanks is disconnected or locked-out and tagged; testing the atmosphere within a bin, silo, or tank for the presence of combustible gases, vapors, and toxic agents when there is reason to believe they may be present; and testing those atmospheres for oxygen content, unless there is continuous forced-air ventilation. OSHA is also proposing that an observer be stationed outside the bin, silo, or tank being entered by an employee and that communications be maintained between the observer and employee entering the area. Communications may be visual, by voice, or by use of a signal line. An employee acting as observer must be trained in rescue procedures; moreover, since suffocation is a major potential hazard to employees entering bins, silos, and tanks, OSHA is proposing to require that an employee trained in cardiopulmonary resuscitation be available to provide assistance.

Since many operators of grain handling facilities employ contractors who may not always be aware of the employer's efforts to safeguard the workplace, OSHA is proposing that employers inform contractors working at the facility of any potential fire and explosion hazards and of applicable safety rules of the facility. Applicable provisions of the facility's emergency action plan would also be explained to all contractors.

Preventive maintenance is an essential operation in eliminating potential ignition sources in grain-handling workplaces. Periodic inspection and lubrication of equipment, such as bearings, belts, milling machinery and dryers, are effective means of keeping equipment functioning properly and safely. OSHA has proposed that employers develop and implement a program of scheduled maintenance, including inspection and lubrication of at least the mechanical and safety control equipment associated with dryers, removal of ferrous objects, dust collection systems, and grain elevator legs. OSHA is not proposing a specific frequency for performing preventive maintenance. The proposal would require, however, that a system be implemented to identify the date on which maintenance was performed and/or the results of inspection of equipment. This information, along with manufacturers' recommendations for effective equipment operation, would

assist the employer in determining the appropriate interval for preventive maintenance.

A number of deaths and injuries have occurred to employees working on equipment because the equipment was inadvertently started or energized. As a means of averting such incidents, OSHA is proposing that employers develop and implement procedures with tags and locks to prevent the inadvertent application of energy or motion to equipment being repaired, serviced or adjusted. OSHA is also proposing that such locks and tags be removed in accordance with established procedures and, then, only by the employee installing them or by the supervisor.

OSHA is proposing further that grain handling facilities improve their capability to provide escape during emergencies. The proposal would require that at least two means of escape be provided from certain areas of the facility and that the escape routes be separated from each other to the extent feasible. The intent of this proposed requirement is to recognize windows, emergency escape ladders, controlled descent devices, and other alternative measures as acceptable means of escape during an emergency.

Information available to OSHA indicates that hazards associated with inside bucket elevator legs are the source of many grain elevator fires and explosions. To address these

hazards OSHA is proposing several requirements applying only to grain elevators with inside legs. For instance, effective January 1, 1985, employers would have to ensure that all such elevator legs are electrically grounded. Effective July 1, 1988, inspection doors would have to be provided in the head pulley and boot section of the elevator. These doors would facilitate inspection of the head pulley-lagging, belt, and discharge-throat of the elevator leg. OSHA is also proposing that elevator legs not be jogged to free a choked leg. This is to ensure that safer, alternative methods are used to clear a choked leg.

In putting forth this proposal, OSHA acted in the belief that the available evidence supported the need for this standard. It is important to note that the proposal is performance-oriented and that it would, moreover, provide flexibility for small-business employers by giving them additional time to comply with certain provisions. For example, smaller establishments would receive an extra three years to comply with the provisions for dust control.

Status of the Rulemaking

As previously mentioned, OSHA issued its proposed standard for Grain Handling Facilities on January 6, 1984. All comments and requests for a public hearing on the proposal were originally due by March 9, 1984, but the agency extended the public comment

period until June 8. Informal hearings on the proposal have been held in Washington, D.C.; Kansas City, Missouri; Minneapolis, Minnesota; and Dallas, Texas. At the close of the hearings, the Administrative Law Judge stated that the record would be kept open until October 10, 1984; post-hearing comments and briefs must be received by November 26, 1984.

To date, OSHA has received more than 4,000 comments on the proposal. Many respondents have raised serious questions concerning the economic and technological feasibility of various of the proposed provisions. OSHA is reviewing all comments carefully and will determine the content of the final rule in the light of these comments. A final standard will not be issued until OSHA is satisfied that all pertinent information, data, and testimony have been evaluated and both economic and technological feasibility have been carefully considered.

Senator NICKLES. Thank you very much. The hearing is now adjourned.

[Whereupon, at 11:45 a.m., the committee adjourned.]

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